CITY OF SAN BRUNO

Sewer System Management Plan March 2016

Original Council Adoption Date: **June 22, 2010**
City Council Recertified: **April 12, 2016**
Resolution Number: **2016-33**
City Wastewater Discharge Identification (WDID): **SSO10176**

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Introduction

Sewer System Management Plan

This Sewer System Management Plan (SSMP) has been prepared by the Public Services Department of the City of San Bruno with the assistance of Causey Consulting, Walnut Creek, CA. It is a compendium of the policies, procedures, and activities that are included in the planning, management, operation, and maintenance of the City's sanitary sewer system.

The State Water Resources Control Board (SWRCB) has issued statewide waste discharge requirements for sanitary sewer systems, which include requirements for development of an SSMP. The State Water Board requirements are outlined in Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated May 2, 2006 (GWDR), and Order No. WQ-2008-0002-EXEC, dated February 20, 2008, which was amended by Order No. 2013-0058-EXEC, effective September 9, 2013, which changed the Monitoring and Reporting Program (MRP). This SSMP is intended to update the City's existing SSMP, in continued compliance with the GWDR.

The structure (section numbering and nomenclature) of this SSMP follows the above referenced GWDR and MRP. This SSMP is organized by the SWRCB outline of elements; and contains language taken from the GWDR as at that beginning of each element. The GWDR uses the term "Enrollee" to mean each individual municipal agency that has completed and submitted the required application for coverage under the WDR (in this case, the Enrollee is the City of San Bruno). The City's waste discharge identification number (WDID) in the California Integrated Water Quality System (CIWQS) is 2SSO10176. All state required information is submitted using this identification number and the number can be used to see all submitted information by the customers, City employees, regulators, environmental organizations and professionals interested in the City collection system operations and performance results.

Settlement Agreements: in 2011, the San Francisco Regional Water Quality Control Board (SFRWQCB) imposed a Cease and Desist order mandating certain improvements to the City's wastewater system and the City negotiated settlement of a lawsuit by San Francisco Baykeeper regarding sanitary sewer overflows (SSOs). Both have significant impacts on day-to-day maintenance requirements and capital investment. The Regional Board Cease and Desist Order include specific sewer system performance requirements and implementation of a supplemental environmental programs (SEP). The agreement

with San Francisco Baykeeper also addresses a range of programs to improve sewer system performance. The City is required to achieve significant reductions in sanitary sewer overflows by 2019 - limiting maximum SSOs to eight under the SFRWQCB order and a maximum of three under the Baykeeper agreement. Reducing SSOs to these levels requires aggressive capital investment to rehabilitate aging pumping stations and collection mains.

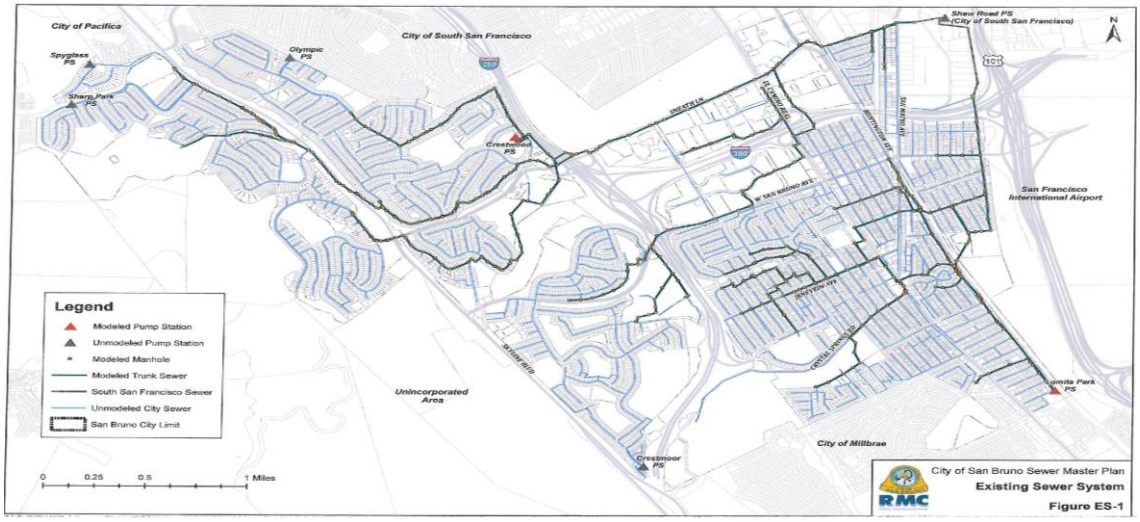
Sanitary Sewer System Facilities

The City operates a sanitary sewer system that serves a population of approximately 41,114 in a 4.9 square mile service area. The sewer system serves 13,090 residential connections and 740 commercial, industrial and institutional customers as of 2015. The sewer system consists of 87.6 miles of gravity sewers (2,415 line segments), 2040 manholes, 2.21 miles of force mains, and 6 sewage-pumping stations. The sewers range in size from four (4) inches to thirty-six (36) inches in diameter. The property owner is fully responsible for installation, maintenance and repair of the private sewer lateral(s) unless they have an approved clean-out at the property line and then the City will inspect and clean the lateral for the private property owner.

Intro Figure 1 contains an overview map of the City's sanitary sewer system.

Intro Table 1 and **Intro Table 2** provide the composition of the sewer piping by size and material of construction.

Intro Table 3 provides the installation age distribution of the City's collection system.



Intro Figure 1: San Bruno Sewer System Map

Intro Table 1: Gravity Sewer System Size Distribution

Diameter, inches	Number of Line Segments	Pipe Length, linear feet	Portion of Sewer System, %
<6 or unknown	68	21,120	4.6
6	1,785	315,353	68.2
8	209	45,300	9.8
10	117	24,200	5.2
12	89	17,100	3.7
14 - 16	13	6,700	1.5
15	1	169	0.04
18	44	9,200	2.0
20	14	4,000	0.9
21	11	2,386	0.6
24	53	13,500	3.1
30 - 36	11	3,500	0.8
Total	**2,415**	**462,528**	**100.0**
Source: City Staff, October 2015			

Intro Table 2: Sewer System Materials of Construction

Material	Number of Line Segments	Pipe Length, LF	Percent of Sewer System
VCP	2,194	441,269	95.4
HDPE/PVC	216	13,218	2.9
CIP	3	5,345	1.1
ACP	2	2,696	0.6
Total	**2,415**	**462,528**	**100.0**
Source: City Staff, October 2015			

Intro Table 3: Inventory of Sewer Lines by Pipe Age

Age in Years	Construction Period	Percent of System	Miles of Main Sewer
0-15	2000 - current	5	4.38
16 – 35	1980 – 1999	10	8.76
36 – 55	1960 – 1979	30	26.28
56 – 75	1940 – 1959	30	26.28
76 – 95	1920 – 1939	10	8.76
95 – 115	1900 – 1119	10	8.76
>115	Before 1900	5	4.38
Total, miles			**87.6**
Total, Linear Feet			**462,528**
Source: CIWQS Operational Performance Report February 2015			

Definitions, Acronyms, and Abbreviations

Asbestos Cement Pipe (ACP)

Association of Bay Area Governments (ABAG)

Best Management Practices (BMP)
Refers to the procedures employed in commercial kitchens to minimize the quantity of grease that is discharged to the sanitary sewer system. Examples include scraping food scraps into a garbage can and dry wiping dishes and utensils prior to washing.

Building Lateral – see Private Sewer lateral

Calendar Year (CY)

California Integrated Water Quality System (CIWQS)
Refers to the State Water Resources Control Board online electronic reporting system that is used to report SSOs, certify completion of the SSMP, and provide information on the sanitary sewer system.

Capital Improvement Plan (CIP)
Refers to the document that identifies future capital improvements to the City's sanitary sewer system.

Cast Iron Pipe (CIP)

City
Refers to the City of San Bruno

Closed Circuit Television (CCTV)
Refers to the process and equipment that is used to internally inspect the condition of gravity sewers.

Computerized Maintenance Management System (CMMS)
Refers to the computerized maintenance management system that is used by the City to plan, dispatch, and record the work on its sanitary sewer system. Maintstar is the propriety software the City uses for CMMS.

Ductile Iron Pipe (DIP)

Division of Water Quality (DWQ)
Refers to the State of California Division of Water Quality of the State Water Resources Control Board.

Fats, Oils, and Grease (FOG)
Refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

Feet per sec (fps)

First Responder
Refers to the field crew or the On Call personnel that are the City's initial response to an SSO event or other sewer system event.

Fiscal Year (FY)
Means a 12-month period beginning July 1 and ending June 30

Food Service Establishment (FSE)
Refers to commercial or industrial facilities where food is handled/prepared/served that discharge to the sanitary sewer system.

Full-time Equivalent (FTE)
Refers to the equivalent of 2,080 paid labor hours per year by a regular, temporary, or contract employee.

General Waste Discharge Requirements (GWDR or WDR)
Refers to the State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated 5/2/2006.

Geographical Information System (GIS)
Refers to the City's system that it uses to capture, store, analyze, and manage geospatial data associated with the City's sanitary sewer system assets.

Global Positioning System (GPS)
Refers to a field device it that is recommended to determine the longitude and latitude of sanitary sewer overflows for use in meeting CIWQS reporting requirements.

Gallons per Day (GPD)

Gallons per Minute (GPM)

Grease Removal Device (GRD)
Refers to grease traps and grease interceptors that are installed to remove FOG from the wastewater flow at food service establishments.

High Density Polyethylene (HDPE)

Horsepower (Hp)

Kilowatt (KW)

Infiltration/Inflow (I/I)
Refers to water that enters the sanitary sewer system from storm water and groundwater.

- Infiltration enters through defects in the sanitary sewer system after flowing through the soil.
- Inflow enters the sanitary sewer without flowing through the soil. Typical points of inflow are holes in manhole lids and direct connections to the sanitary sewer (e.g. storm drains, area drains, and roof leaders).

Lateral – See Private Sewer Lateral

Legally Responsible Official (LRO)
Person(s) designated by San Bruno to be responsible for formal reporting and certifying of all reports submitted to CIWQS.

Manhole (MH)

Refers to an engineered structure that is intended to provide access to a sanitary sewer for maintenance and inspection.

Mainline Sewer
Refers to City wastewater collection system piping that is not a private lateral connection to a user.

Monitoring, Measurement, and Plan Modifications (MMPM)

Monitoring and Reporting Program (MRP)
Refers to the State Water Resources Control Board WQ 2013-0058-EXEC effective September 9, 2013.

Municipal Separate Storm Sewer System (MS4)

National Association of Sewer Service Companies (NASSCO)

Notification of an SSO
Refers to the time at which the City becomes aware of an SSO event through observation or notification by the public or other source.

Nuisance
California Water Code section 13050, subdivision (m), defines nuisance as anything that meets all of the following requirements:

a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
c. Occurs during, or as a result of, the treatment or disposal of wastes.

Office of Emergency Services (OES)
Refers to the California State Office of Emergency Services.

Operations and Maintenance (O&M)

Overflow Emergency Response Plan (OERP) SSMP Element VI

Pipeline Assessment and Certification Program (PACP)
Refers to the NASSCO certification program that is used for the evaluation and condition assessment of sewer lines and appurtenances from closed circuit televising of the lines and appurtenances.

Polyvinylchloride Pipe (PVC)

Preventive Maintenance (PM)
Refers to maintenance activities intended to prevent failures of the sanitary sewer system facilities (e.g. cleaning, CCTV, repair, etc.).

Private Sewer Lateral (PSL)
That portion of a private property's building sewer as defined by the plumbing code, and is further defined as the piping of a drainage system that extends from the end of the building drain to the public sewer which includes the connection to the public sewer

unless a property line cleanout has been installed and then the private sewer lateral extends just to the property line cleanout..

Private Lateral Sewage Discharges (PLSD)
Sewage discharges that are caused by blockages or other problems within a privately owned lateral.

Property Damage Overflow
Refers to a sewer overflow or backup that damages a property owner's premises.

Public services (PW)

Pump Station (PS)
A facility that transmits and lifts sewage into the City gravity sanitary sewer collection system

Regional Water Quality Control Board (SFRWQCB)
Refers to the San Francisco Regional Water Quality Control Board.

Reinforced Concrete Pipe (RCP)
San Bruno Municipal Code (SBMC)
Codifications of general orders of the City of San Bruno

Sanitary Sewer Backup (Backup)
A wastewater backup into a building and/or on private property caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

Sanitary Sewer Overflow (SSO)
Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:

(i) Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;
(ii) Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
(iii) Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

SSOs that include multiple appearance points resulting from a single cause will be considered one SSO for documentation and reporting purposes in CIWQS.

NOTE: Wastewater backups into buildings caused by a blockage or other malfunction of a building lateral that is privately owned are not SSOs.

SSO Categories:

Category 1: Discharge of untreated or partially treated wastewater of any volume resulting from a sanitary sewer system failure or flow condition that either:

- Reaches surface water and/or drainage channel tributary to a surface water; or
- Reached a Municipal Separate Storm Sewer System (MS4) and was not fully captured and returned to the sanitary sewer system or otherwise captured and disposed of properly.

Category 2: Discharge of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from a sanitary sewer system failure or flow condition that either:

- Does not reach surface water, a drainage channel, or an MS4, or
- The entire SSO discharged to the storm drain system was fully recovered and disposed of properly.

Category 3: All other discharges of untreated or partially treated wastewater resulting from a sanitary sewer system failure or flow condition.

Sanitary Sewer System or Sewer System
Refers to the sanitary sewer facilities that are owned and operated by the City of San Bruno.

Sensitive Areas
Refers to areas where an SSO could result in a fish kill or pose an imminent or substantial danger to human health.

Sewer Service Lateral
Refers to the piping that conveys sewage from the building to the City's wastewater collection system.

Sewer System Management Plan (SSMP)
Refers to the Plan required by the State of California General Waste Discharge Requirements for Sanitary Sewer Systems.

South San Francisco (SSF)

South San Francisco/San Bruno Water Quality Control Plant (SSF/SB WQCP)
Refers to the wastewater treatment plant jointly owned by the two agencies and operated by the City of South San Francisco.

Standard Operating Procedures (SOP)
Refers to written procedures that pertain to specific activities employed in the operation and maintenance of the San Bruno Sanitary Sewer System.

State Water Resources Control Board (SWRCB)
Refers to the California Environmental Protection Agency, State Water Resources Control Board.

Superintendent
The Superintendent of the South San Francisco Water Quality Control Plant who has the authority to enforce compliance with the provisions of the San Bruno FOG Control Plan and to promulgate regulations designed to assist in achieving FOG Control Plan compliance (SBMC 10.04.500 and 10.2.260) (SSFMC 14.04.040 and 14.08.400).

Supplemental Environmental Project (SEP)

Supervisory Control and Data Acquisition (SCADA)
Refers to the system that is employed by the City to monitor the performance of its pump stations and to notify the operating staff when there is an alarm condition that requires attention.

System Evaluation and Capacity Assurance Plan (SECAP) SSMP Element VIII

Untreated or Partially Treated Wastewater
Any volume of wastewater discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.

Vitrified Clay Pipe (VCP)

Waste Discharge Identification Number (WDID)
Unique identification number issued by the SWRCB to the City of San Bruno (Enrollee) for the tracking and reporting of all requirements under the GWDR.

Waste Discharge Requirements (WDR) – see GWDR above.

Wastewater (WW)

Water Body
Any stream, creek, river, pond, impoundment, lagoon, wetland, or bay.

Waters of the State
Refers to "any surface water or groundwater, including saline waters, within the boundaries of the state." (California Water Code § 13050(e)).

Waters of the United States
Refers to the Environmental Protection Agency definition included in the Clean Water Act Part 230.3 Definitions.

Water Quality Control Plant (WQCP)
South San Francisco/San Bruno treatment plant jointly owned by the two agencies but operated by the City of South San Francisco.

Water Quality Monitoring Plan (WQMP)
Refers to the Plan required by the Monitoring and Reporting Program as of September 9, 2013 for sanitary sewer overflows of 50,000 gallons or greater.

Work Order (WO)
Refers to a document (paper or electronic) that is used to assign work and to record the results of the work.

References

State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, California State Water Resources Control Board, May 2, 2006.

State Water Resources Control Board Order No. Order No. 2013-0058-EXEC, Amending Monitoring And Reporting Program For Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, September 9, 2013.

Consent Decree, Baykeeper, Inc. vs. City of San Bruno, United States District Court, Northern District of California, San Francisco Division Civil Case No. CV 10-00753 SC, Filed 9/27/11

Settlement Agreement and Stipulation for Entry of Order, Order Number R2-2011-0044, Administrative Civil Liability Complaint No. R2-2010-0004

California Regional Water Quality Control Board San Francisco Bay Region, Cease and Desist Order No. R2-2011-0051.

Element I: Goals

SWRCB Waste Discharge Requirement:

The goal of the Sewer System Management Plan (SSMP) is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.

I.1 SSMP Goals

The City has established seven (7) goals to guide the implementation and success of the City's SSMP. These goals are designed to facilitate and target the management, operations and maintenance of the sanitary sewer collection system in a manner that will sustain the infrastructure, protect public health and the environment, and achieve compliance with the State Water Resources Control Board's General Waste Discharge Requirement (GWDR) for Sanitary Sewer Systems. These goals include:

1. To properly manage, operate, and maintain all portions of the City wastewater collection system.
2. To provide adequate capacity to convey peak wastewater flows.
3. To minimize the frequency and volume of sanitary sewer overflows (SSO).
4. To contain SSOs to the extent feasible.
5. To minimize public contact with SSOs.
6. To mitigate the impacts that are associated with all SSOs that may occur.
7. To comply with all applicable regulatory notifications and reporting requirements

Element II: Organization

SWRCB Waste Discharge Requirement:

The Sewer System Management Plan (SSMP) must identify:

a. The name of the responsible or authorized representative as described in Section J of this Order.
b. The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and
c. The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health San Bruno, Regional Water Board, and/or State Office of Emergency Services (OES)).

II-1 Organizational Structure

The organization chart for the management, operation, and maintenance of the City's wastewater collection system is shown below.

Figure 2-1
SSMP Responsibility Organization Chart

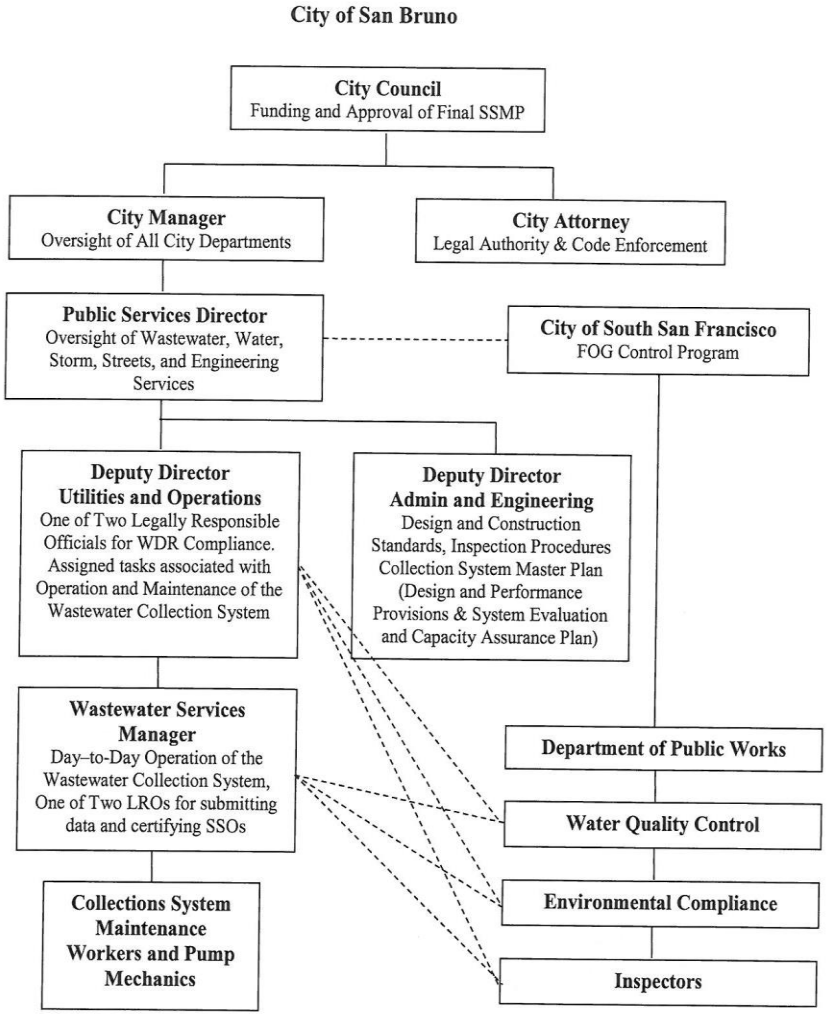


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Figure II - 1: San Bruno Organization Chart

II-2 Authorized Representatives

The City's *Legally Responsible Officials* (LRO) for wastewater collection system matters are identified below along with their roles and responsibilities for the collection system operations. They are authorized to submit electronic and written spill reports to the Office of Emergency Services (OES). They are the City's legally responsible officials who are authorized to certify all other required submittals to the SWRCB.

The following are the general position descriptions along with the LRO designations for interaction with the SWRCB and the RWQCB on all sewer system responsibilities.

City Council: The City of San Bruno was incorporated on December 23, 1914 as a General Law City. San Bruno is governed by the City Council and operates under a Council-Manager form of government. As the policy making body, it has the ultimate responsibility to the people of San Bruno and the implementation of all programs and City services. It approves all ordinances, resolutions, and major contracts, modifies and approves the budget, and has the responsibility of employing a City Manager and City Attorney.

All major changes in direction or emphasis and organizational changes must be approved by the City Council. The City Council sets the policy and adopts the City budget. The City Manager and staff enforce the laws and implement the programs and policies that are established by the City Council. The City Council has the responsibility and authority for funding and final approval of this SSMP. All major changes in direction or emphasis and organizational changes must be approved by the City Council. The City Council sets the policy and adopts the City budget.

City Manager: The City of San Bruno operates under the Council/Manager form of government. In accordance with the provisions of the Municipal Code, the City Manager is responsible for preparing, and upon City Council adoption, managing implementation of the City budget which outlines the City's annual work program and which balances the cost of providing City services within the available financial resources. The City Manager serves as the Chief Executive Officer of the municipal corporation and as Executive Director of the San Bruno Redevelopment Agency. As such, the City Manager is responsible for the appointment and supervision of all City department heads and for oversight of all full-time employees and all City operations to ensure that City services are delivered in an economical and effective manner.

City Attorney: The City Council appoints the City Attorney to serve as "corporate" legal counsel to the City as an entity and advises the City Council and City staff on a broad range of municipal issues. These matters typically include open meeting laws, public record laws, conflicts of interests, land use and environmental laws, claims and litigation, municipal elections, employment and labor relations, municipal utilities, public services contracts, code enforcement, and resolutions, ordinances and other legal documents. The City Attorney receives policy direction from the City Council and acts as legal advisor and counsel to the City Council, City Boards and Commissions, City Manager, and City departments and represents the City in litigation against the City.

Public Services Director (LRO): The Public Services Department (PSD) Director is responsible and has been assigned authority to plan, organize, direct, and review the activities and operations of the Public Services Department. This includes Wastewater, Water, Storm, Streets, and Engineering.

Deputy Public Services Director, **Administration and Engineering (City Engineer) (LRO):** The City Engineer is responsible for all municipal engineering. This includes the development and implementation of design and construction standards as well as inspection procedures (Design and Performance Provisions within the SWRCB WDR)

Deputy Public Services Director, Utilities & Operations (LRO): Under general direction, plans, organizes, coordinates and directs the activities of the various functional working units in the Utilities and Operations Divisions of the Public Services Department; supervises technical staff and subordinate personnel in the planning and implementation of division functions including water operations, wastewater operations, storm drainage systems, fleet and equipment maintenance, streets, sidewalks, signs, traffic signals and street lighting; and performs related work as required..

The Deputy Director for Utilities & Operations also has the overall task but not overall authority for the operation and maintenance of the wastewater collection system. The Deputy Director for Utilities & Operations is assigned and takes on the work associated for the preparation of the SSMP, for all audits, and for all monitoring and reporting under the SWRCB's WDR.

Wastewater Services Manager (LRO): The Wastewater Services Manager manages, supervises and participates in a wide range of maintenance and repair related projects involving the City's wastewater collection system.

Management Analyst I/I: Assists with the following Wastewater programs and tasks: budget preparation, training programs, reports regarding CD and CDO, RFQ's, RFP's, contract creation, and any other WW related tasks requested by the Department. No CMMS entry tasks. However, does utilize CMMS for queries and budget extraction information.

Associate Engineer: Performs complex engineering work in the provision of office and engineering support and field engineering support for environmental, water, sewer, street, and other Public Works projects and programs ensuring technical competence and compliance with all current codes and criteria; serves as a Project Manager.

Principal Engineer: Plans, supervises and coordinates difficult, professional engineering work in support of a wide range of complex Public Works projects; directs the work of subordinate professional and technical engineering staff; assists in the administration and supervision of the Engineering Division.

Engineering Technician: The class of Engineering Technician/Public Works Inspector performs a variety of sub-professional engineering work involving both office and field assignments. These include design detailing, surveying, right-of-way and public works inspection.

Executive Assistant: Performs a variety of highly responsible, complex and confidential clerical, technical administrative and secretarial duties for a department or division. Employees perform the most difficult and responsible types of duties including providing administrative support to a department or division in areas such as budget, personnel or a department program or function, as well as providing responsible secretarial support to management and professional staff which requires frequent use of tact, discretion, initiative and independent judgment.

Secretary: Assists with the following Wastewater tasks: CMMS information entry, invoice processing, customer service, inventory purchasing, scheduling and any other WW related tasks requested by the Department.

Lead Maintenance Worker: The Lead Maintenance Worker receives general supervision from the Wastewater Services Manager, performs a variety of semi-skilled and/or skilled tasks in wastewater operations, maintenance, repair and/or construction work including providing lead worker assistance to supervisory and/or management staff as appropriate to the Department. The Lead Maintenance Worker is responsible for day-to-day operation of the collection system and the Overflow Emergency Response Plan under the SWRCB's WDR.

Pump Mechanic: Under general supervision of the Wastewater Service Manager performs semi-skilled, skilled, and administrative work in the repair and maintenance of mechanical equipment at wastewater pump stations and storm water pumping stations operated by the City. A Flood Control District owns the storm water stations and the pump mechanics perform basic maintenance required and notify the Flood Control District for significant issues about the two storm water pumping stations.

Public Services Maintenance Worker II: The Public Services Maintenance Worker II receives general level supervision from higher-level staff such as Wastewater Services Manager. Duties include performing a variety of semi-skilled and skilled tasks in maintenance work, and operating equipment in the construction, operation, repair, maintenance, and replacement of the City's wastewater collection and conveyance facilities and systems. The Public Services Maintenance Worker IIs are also responsible to respond to and mitigate SSOs.

Public Services Maintenance Worker I: The Public Services Maintenance Worker I receives immediate supervision from higher level staff such as Wastewater Services Manager progressing to general supervision over time with training and demonstrated work performance. This is the entry level - journey level class in the Public Services Maintenance Worker series. Positions in this class usually perform most of the duties required of Maintenance Worker II's but are not expected to function at the same skill level and usually exercise less independent direction and judgment on matters related to work procedures and methods. The Public Services Maintenance Worker I's are also responsible to respond to and mitigate SSOs.

Building Inspectors: Performs a variety of routine and complex technical work in building inspection to ensure that the Uniform Building Code and other related codes and standards are met. Performs inspections of all private sewer related improvements, rehabilitations and repairs on private sewer laterals.

The following position classifications at the South San Francisco Wastewater Treatment Plant provide support and compliance for the City fats, oils and grease program in the City of San Bruno as designated in the San Bruno Municipal Code.

Superintendent: The South San Francisco Publicly Owned Treatment Plant Superintendent or the Superintendent's authorized representative is an employee of the City of South San Francisco, and except as otherwise provided, has the authority to administer, implement and enforce the provisions of the San Bruno FOG Control Program on behalf of the City of San Bruno.

Environmental Compliance Inspector: The Environmental Compliance Inspector of the City of South San Francisco as the designated representative for the permitting, inspection and enforcement of the San Bruno FOG Control Program.

II-3 Responsibility for SSMP Implementation and Maintenance

The Public Services Director shall have the overall responsibility for, implementing, periodically auditing, and maintaining the City's SSMP. He/she may delegate these responsibilities to his/her staff.

Other City Staff responsible for developing, implementing, and maintaining specific elements of the City's SSMP, along with their job titles and contact information, are shown in **Table II - 1**.

Table II - 1: Responsible Officials in Water Quality Chain of Communication

Element	Element Title	Responsible City Official	Phone	Email
	Introduction	Wastewater Manager, D. Bosch	650-616-7172	dbosch@sanbruno.ca.gov
1	Goals	"Acting" Public Services Director, J. Tan	650-616-7075	jtan@sanbruno.ca.gov
2	Organization	"Acting" Public Services Director, J. Tan	650-616-7075	jtan@sanbruno.ca.gov
3	Legal Authority	City Attorney, M. Zafferano	670-616-7003	mzafferano@sanbruno.ca.gov
4	Operations and Maintenance Program	Wastewater Manager, D. Bosch	650-616-7172	dbosch@sanbruno.ca.gov
5	Design and Performance Provisions	"Acting" Public Services Director, J. Tan	650-616-7075	jtan@sanbruno.ca.gov
6	Overflow Emergency	Deputy Director, J. Burch	650-616-7179	jburch@sanbruno.ca.gov
7	Fats, Oils and Grease (FOG)	Deputy Director, J. Burch	650-616-7179	jburch@sanbruno.ca.gov
8	System Evaluation and Capacity	"Acting" Public Services Director, J. Tan	650-616-7075	jtan@sanbruno.ca.gov
9	Monitoring, Measurement and Program Modifications	Deputy Director, J. Burch	650-616-7179	jburch@sanbruno.ca.gov
10	Program Audits	Management Analyst, R. Wood	651-616-7046	rwood@sanbruno.ca.gov
11	Communications Program	"Acting" Public Services Director, J. Tan	650-616-7075	jtan@sanbruno.ca.gov

II-4 SSO Reporting Chain of Communication

The SSO Reporting Chain of Command follows the Organization Chart shown above in Figure II - 1: San Bruno Organization Chart. The SSO Reporting process and responsibilities are described in detail in the **Overflow Emergency Response Plan, Figure II - 2.**

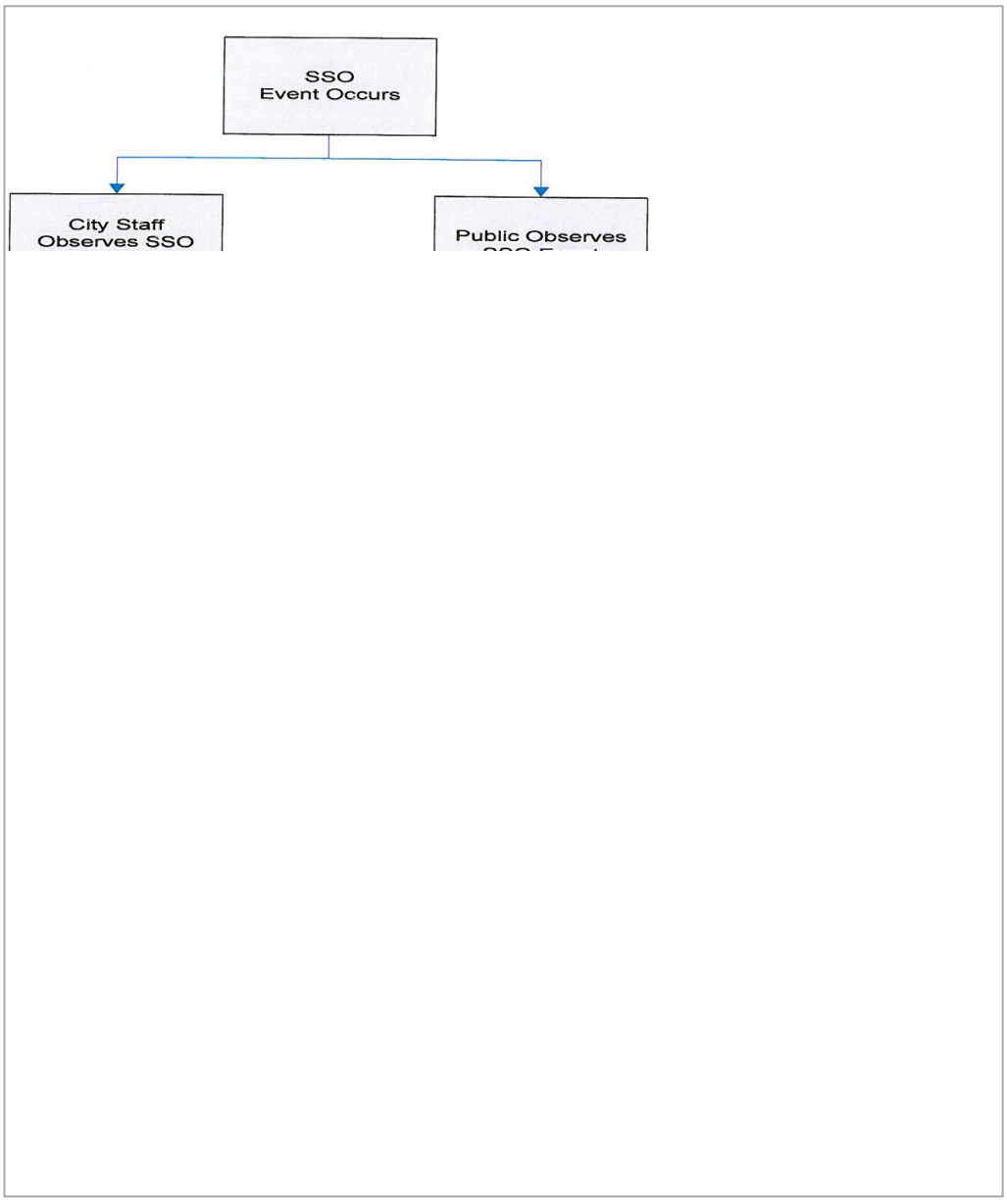


Figure II - 2: Reporting Chain of Communications

III: Legal Authority

SWRCB Waste Discharge Requirement:

Each Enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

- Prevent illicit discharges into its sanitary sewer system (examples may include I/I, storm water, chemical dumping, unauthorized debris and cut roots, etc.);
- Require that sewers and connections be properly designed and constructed;
- Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;
- Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and
- Enforce any violation of its sewer ordinances.

III-1 Municipal Code

The San Bruno Municipal Code describes the City's current legal authority required for compliance with the GWDR. That authority is specifically contained within Title 10 of the Municipal Code and generally within other Municipal Code Titles that are summarized in **Table III - 1** below.

Table III - 1: Summary of Legal Authorities in the San Bruno Municipal Code and Other Sources

Requirement	**Legal Authority Reference San Bruno Municipal Code Chapter 10.12 South San Francisco Municipal Code SSFMC**
Prevent illicit discharges into the wastewater collection system	10.12.010 10.12.150 10.12.200 10.12.400

	SSFMC 14.08.210 (c)
Limit the discharge of fats, oils, and grease and other debris that may cause blockages*	10.12.150 11.20.10 11.20.20 R2-2008-0094, NPDES No. CA0038130
Require that sewers and connections be properly designed and constructed	10.12.100 10.12.180
Require proper installation, testing, and inspection of new and rehabilitated sewers	10.12.100 10.12.180 12.44.080 San Bruno Standard Plans & Specifications
Clearly define City responsibility and policies for the private sewer laterals	10.13.010 to 10.13.070
Ensure access for maintenance, inspection, or repairs for portions of the service lateral owned or maintained by the City	10.08.100
Control infiltration and inflow (I/I) from private service laterals	10.12.200
Requirements to install grease removal devices (such as traps or interceptors), design standards for the grease removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements	11.20.010 11.20.020 SSFMC 14.08.530
Authority to inspect grease producing facilities	6.08.150 10.12.030
Enforce any violation of its sewer ordinances	10.12.260 10.12.360 to 10.12.420 10.12.500 10.12.540 10.13.050 to 10.13.070 11.20.020 SSFMC 14.08.030, 14.08.210 (b) and (c), 15.12.060

* Joint Agreement between the City of South San Francisco and City of San Bruno for the Operation, Maintenance and Construction of the Publicly Owner Treatment Plant dated April 3, 1972 as amended.

III-2 References

South San Francisco/San Bruno Joint Operating Agreement for the Water Quality Control Plant

San Francisco Bay Region Water Quality Control Board Order No. R2-2014-0012, National Pollution Discharge Elimination System Permit No. CA0038130

San Bruno Municipal Code

South San Francisco Municipal Code

Baykeeper, Inc. vs. City of San Bruno, United States District Court, Northern District of California, San Francisco Division Civil Case No. CV 10-00753 SC, Filed 9/27/11, Consent Decree

Settlement Agreement and Stipulation for Entry of Order, Order Number R2-2011-0044, Administrative Civil Liability Complaint No. R2-2010-0004

California Regional Water Quality Control Board San Francisco Bay Region, Cease and Desist Order No. R2-2011-0051.

Element IV: Operations and Maintenance Program

SWRCB Waste Discharge Requirement:

The Sewer System Management Plan (SSMP) must include those elements listed below that are appropriate and applicable to the Enrollee's system:

a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water conveyance facilities;
b) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventive Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;
c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;
d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and provide equipment and replacement part inventories, including identification of critical replacement parts.

IV-1 Collection System Mapping

The City of San Bruno Public Services Department is comprised of the following Divisions including Engineering, Water, Wastewater, and Streets/Stormwater. Division staff identifies all City utilities and facilities. Divisions have been GIS mapping their utilities since 2006. And the maps are constantly being updated. Division staffs identify

changes or findings, and the City's GIS contractor makes updates. Division staff has access to both hard copy maps and computerized maps. Division vehicles have hard copy maps, and in field laptops that display utility layers and CMMS programs. The vehicles also have copies of the City storm water system maps for determination of possible storm water inlets and facilities. This information is utilized and available for SSO response.

IV-2 Preventive Operation and Maintenance

The elements of the City's sewer system O&M program include:

- Proactive, preventive, and corrective maintenance of gravity sewers;
- Ongoing CCTV inspection program to determine the condition of the gravity sewers;
- Rehabilitation and replacement of sewers that are in poor condition; and
- Periodic inspection and preventive maintenance for the pump stations and force mains.

The collection system organization chart for implementing the City's O&M program is shown below in **Figure IV - 1: San Bruno Public Services Department Organization Chart**.

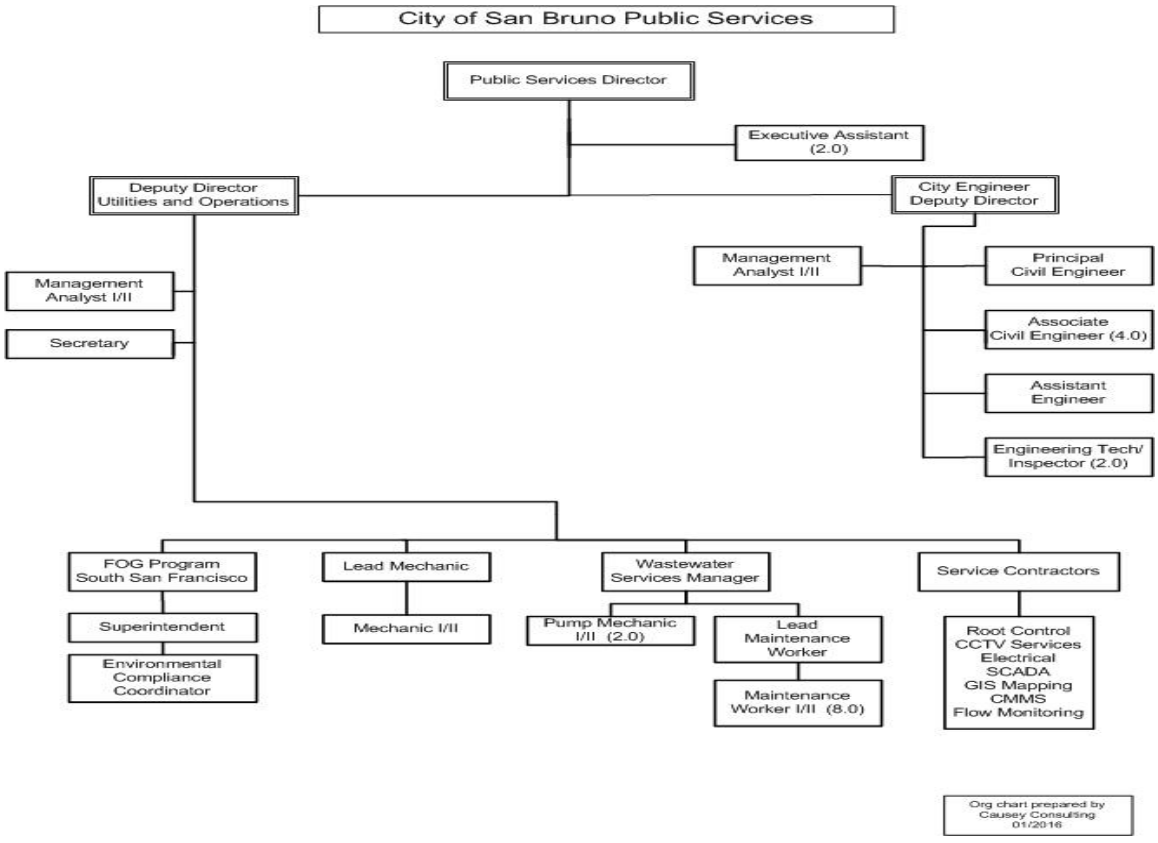


Figure IV - 1: San Bruno Public Services Department Organization Chart

IV-2.1 Gravity Sewers

The City proactively cleans its entire Sanitary Sewer System at least every three (3) years, and it preventively cleans sewers with a history of problems (hot spots) every two (2) weeks, one (1) month, three (3) six (6) and twelve (12) months.

The Wastewater Division consists of 12 Employees - (1) Manager, (1) Lead Worker, (2) Pump Mechanics, and (8) collection system maintenance workers. The Lead Worker and Maintenance Workers are responsible for all maintenance/cleaning/repair of the gravity collection system. The Pump Mechanics are responsible for all pump station maintenance. When necessary, contractors are used to enhance ongoing programs such as CCTV, repairs, or large pump station repairs.

The newly created programmable maintenance system of cleaning every sewer main within the City at a minimum of once every two years was initiated in March 2012. The schedule was installed in the Divisions CMMS system, and runs to date. As a result, City SSOs went down over the next several years from approximately 30 to 12 a year.

The preventative cleaning maintenance program consists of 6 cleaning cycles for mains. Mains are either Hydro jetted, mechanical rodded, or chemical root treated. The cleaning cycles are bi-weekly, monthly, 3-month, 6-month, 1-year, and 36-month. The Division considers bi-weekly cleaning to be "frequent/Hot spots". Cleaning frequencies are adjusted from what the crew notices when they clean. Changes in cleaning frequency are adjusted within the CMMS system. All lines regardless of diameter are on a preventative cleaning cycle and are due from the date of last being cleaned. The City is broken up into 36 Zones. And into cleaning cycles of 36 months, 1 year, 6 months, 3 months, 1 month, and Bi-weekly.

The line cleaning crew evaluates cleaning results based upon the Standard Sewer Cleaning Results derived from the City's **Standard Operating Procedures** shown in **Appendix IV-1**. Staff places line segments on the hot spot schedules based upon past cleaning results, history of SSO events, history of cleaning results, video inspections and professional judgment.

Summary statistics for the high frequency lines are shown in **Table IV - 1: Hot Spot Cleaning Lines** below. The City added an additional cleaning crew(s) to assure continued support for the collection system operations.

The historical line cleaning results are shown in **Table IV - 2: Historical Line Cleaning Results** below. Large diameter pipes 16 inch in diameter or greater are cleaned using service contractors rather than City staff. City collection system staff maintains not only

the sewer system but also many other public services infrastructure assets in the City Public Services operations.

Table IV - 1: Hot Spot Cleaning Lines

Frequency	Number of Segments	Linear Feet	Annual Cleaning, Linear Feet
2 weeks	4	992	25,792
1 month	24	5,466	65,592
3 months	142	30,622	122,488
6 months	278	62,535	125,070
12 months	206	43,302	43,302
24 months	173	36,372	18,186
TOTAL	**827**	**179,288**	**40**

Table IV - 2: Historical Line Cleaning Results

Calendar Year	Line Cleaning Results, linear feet	Line Cleaning Results, miles	Percent of System
2014/2015			
2013/2014	417,146	79.0	94.0
2012/2011	462,883	87.7	104.3
2011/2012	231,558	43.9	52.2
2010/2011	39,695	7.5	8.9
2009/2010	101,232	19.2	22.8
Total	**1,252,513**	**237**	**270.2**
Average per Year	250,503	47	56.5

The manhole cleaning and inspection program is conducted at manhole locations that are checked weekly due to having hardly any flow. Crews have to help push sewage around turns in manholes with long shovels and then introduce water to those manholes so that there is enough flow to carry solids downstream. This is a separate program from the once every 5 year manhole inspection and assessment program.

Mainlines are added to the chemical root treatment program from operator assessment and decision. Once an operator notes that a line has a low to moderate amount of roots in a line or identifies a location that has a probability to cause a root blockage in the future. The line is placed on the chemical root program within the CMMS system. If the status of a specific main line changes and there is no more threat from root intrusion the line can be removed from the root program within the CMMS at any time.

The City CCTVed all but 1.3 miles of the sanitary sewer system from 2009 to 2012. These last remaining lines were not inspected due to restricted access or surcharged conditions. These last few lines were assessed in 2014. From those earlier assessments major point repairs, sewer main lining, and sewer main line repairs and replacements were evaluated and included in the 2013 San Bruno Sewer Master Plan. All pipeline inspections have now been rated for condition according to the NASSCO PACP rating system for structural and maintenance defects.

The historical results of the City CCTV efforts are shown below in

Table IV- 3: Historical Results of Closed Circuit Television and the final PACP ratings of pipelines from the Sewer Master Plan are shown in **Figure IV-2.**

The future CCTV program will be based upon a condition-based approach with return frequencies determined according to the flow chart **Figure IV - 2: PACP Pipeline Sewer Ratings** , starting with pipes that are 20 years old or older**.**

Table IV- 3: Historical Results of Closed Circuit Television

Calendar Year	CCTV Performance linear feet
Entire System	443,648

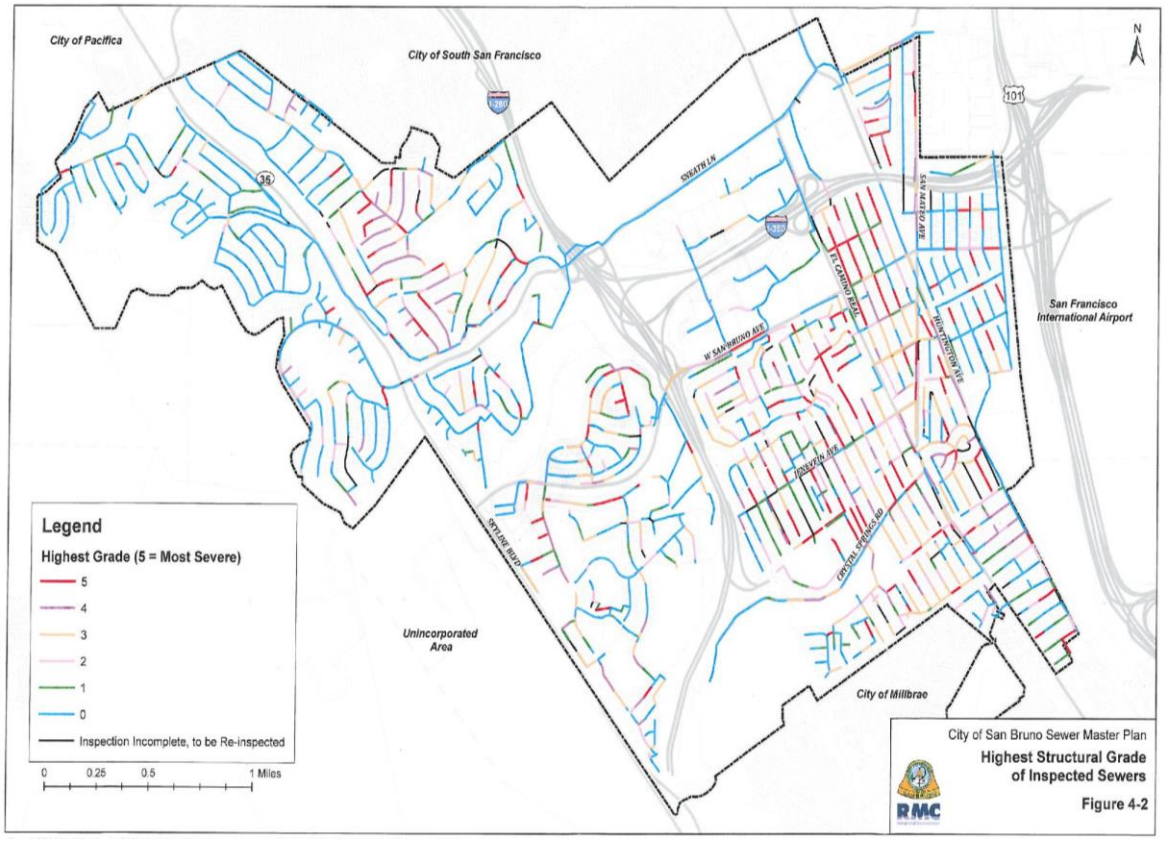


Figure IV - 2: PACP Pipeline Sewer Ratings

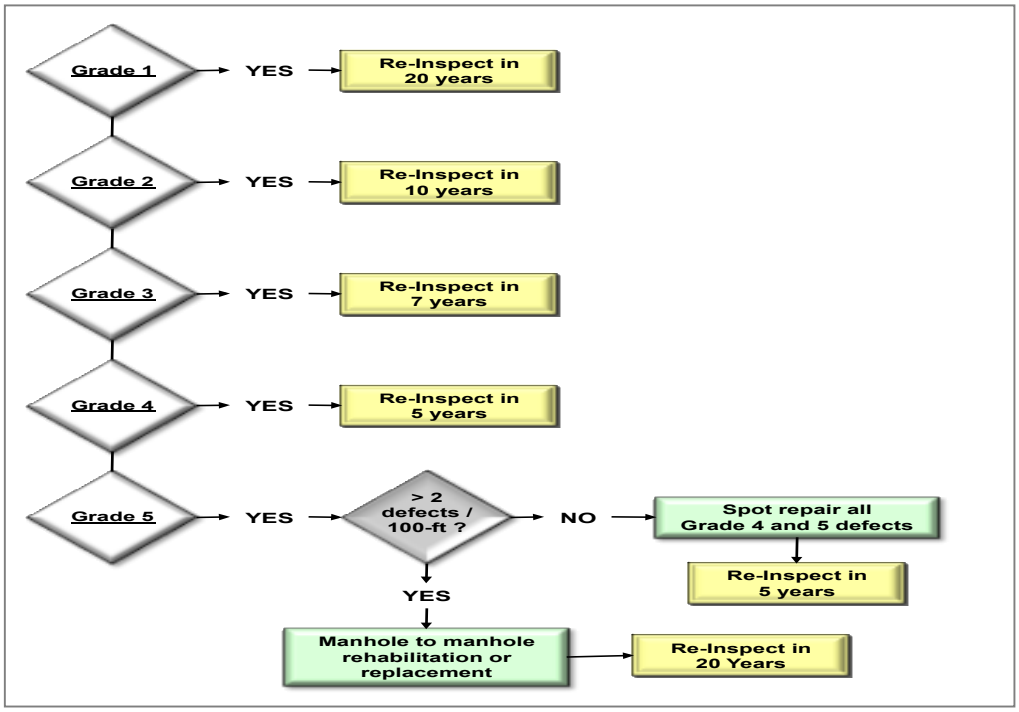


Figure IV - 3 CCTV Return Frequency based upon PACP Ratings

The wastewater collection system staff maintains a list of known structural deficiencies determined from the CCTV results conducted during pipeline assessments. This list is maintained in priority order by structural rating. High priority structural deficiencies, PACP rating 5, if found to exist, will be repaired as soon as possible by outside contractors.

Gravity sewer maintenance is currently scheduled using work orders generated by the City's Maintstar CMMS. Completed gravity sewer maintenance is recorded using work orders. The Wastewater Division CMMS system is used for many programs, maintenance control, historical information, and cost recording. The Manager, Lead Maintenance Worker, and all Maintenance Workers utilize the system. The following programs or tasks are housed or maintained within the CMMS:

- Programmed preventative maintenance cleaning program for hydro flushing
- Programmed preventative maintenance cleaning program for mechanical rodding
- Programmed preventative maintenance cleaning program for lower lateral maintenance
- Manhole inspection program
- Root Foaming program
- Pump station maintenance program
- All calls for service
- All work orders
- Manhole repair
- All sewer repairs
- (Future CCTV Inspection information)
- (Future force main inspections)
- (Future manhole at force main "daylight" gravity location point inspection)

The Wastewater Division Manager is responsible for the coordination of the CMMS and GIS systems. The Division Manager, City IT Department, and CMMS Provider maintain the CMMS system. At times, the Division will hire outside computer program contractors to create new programs or tasks within the CMMS system to enhance collection system maintenance. The City IT Department, City GIS contractors, and Department Managers maintain the City GIS system.

Because of recent increased odor complaints, the City has increased its public education on odors, increased line cleaning in those areas and added oxygen injection at two of the largest pump stations. The City has spent approximately one million dollars to date attempting to resolve these issues and is committed to exploring all options and opportunities to reduce or eliminate odor issues from the collection system and pump stations.

IV-2.2 Pump Stations

The City operates and maintains 6 pump stations, as shown below in **Figure IV - 4: Pump Station Location Map**. The City conducts regular operational inspections of its pump stations. All sanitary sewer pump stations are inspected on a daily basis. The wet wells are cleaned monthly and the mechanical and electrical equipment preventive maintenance is scheduled annually for cleaning.

The City has developed contingency plans for each of the pump stations and these are referenced at the end of this Element.

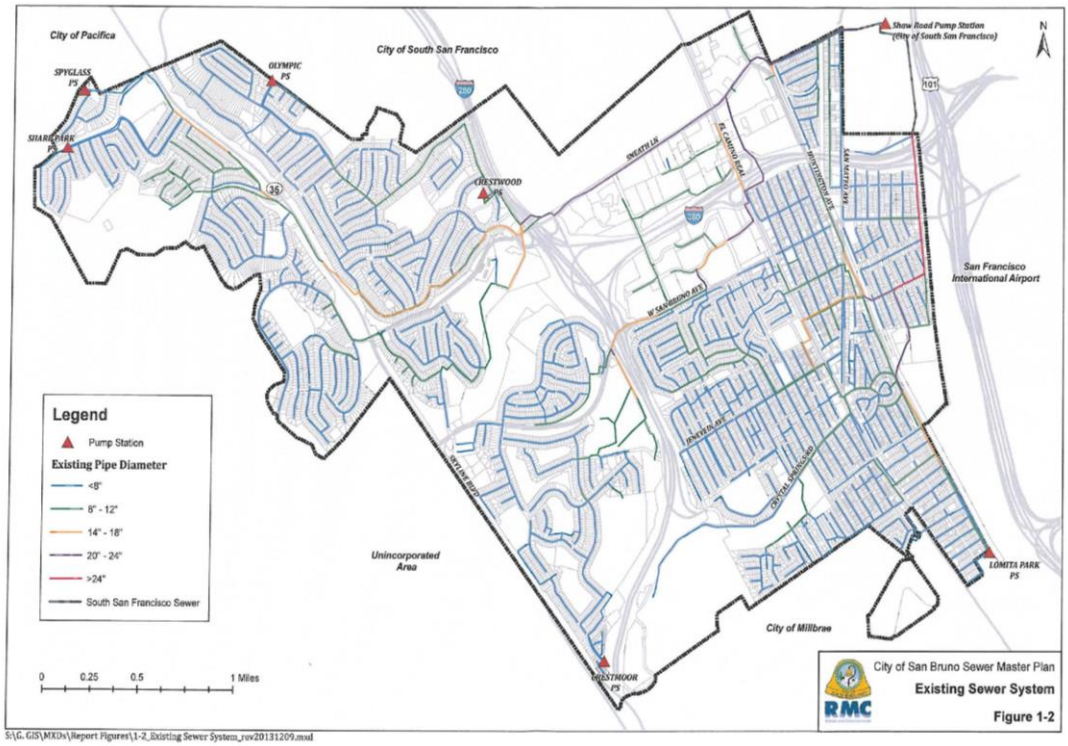


Figure IV - 4: Pump Station Location Map

All pump stations and force mains have been identified to be rehabilitated and or replaced per the 2014 San Bruno Sewer Master Plan. All force mains are either cast iron or AC pipe. No inspections have historically been done due the fear of damaging the pipes and causing an overflow. Also due to their locations in deep valleys, there was no possible way to drain the force mains or bypass pump for inspection. Crews have historically visually inspected the areas above force mains for leaks. But there is no documentation of those inspections. As part of the ongoing manhole inspection program, the Division will make a separate inspection program of inspecting manholes for effect where force mains discharge to gravity mains.

Each of the pump stations discharge to force mains that are identified and described in the

Table IV - 4: Pump Station Locations and Descriptions, shown below.

IV-2.3 Force Mains

The Wastewater Division currently conducts no maintenance on force mains. This is due to the age, and delicate material such as AC pipe. The City has identified all force mains for rehabilitation and replacement. To date, the Sharp Park pump station force main has been replaced and future maintenance practices are being identified. The Olympic pump station and force main was rehabilitated in the summer of 2015. The City is in current design to rehabilitate the Spyglass pump station and force main.

Force main alignments will be inspected on an annual basis, and discharge locations will be surveyed for possible damage and corrosion from the release of hydrogen sulfide when the force mains discharge to the gravity collection system.

Table IV - 5: Force Main Locations and Descriptions shown below lists the force main asset information. Many of the force mains were installed at the time of the original construction of the associated pump station.

Table IV - 4: Pump Station Locations and Descriptions

Pump Station Name/ Installed	Location	No. Pumps	Pump GPM	Pump Manufacturer	Pump HP	Standby Generation-KW
Lomita Park 1960-2003	1049 San Antonio Ave.	2	250	Flygt	15 20	50
Crestmoor Dr. 1963-2003	2641 Crestmoor Dr.	2	250	Gorman-Rupp	25	80
Crestwood Dr. 1960-1992	1495 Crestwood Dr.	4	225 & 840	Flygt	2-5 2-20	40
Olympic Dr. 1961	2540 Olympic Dr.	2	200	Paco	30	75

Sharp Park Dr. 1964-2002	3496 Highland Dr.	2	1000	Flygt	105	135
Spyglass Dr. 1983	2091 Spyglass Dr.	2	200	Moyno	25	45
Totals	**-**	**12**	**-**	**-**	**-**	**-**

Source: Sewer Master Plan, January 2014

Table IV - 5: Force Main Locations and Descriptions

Name of Pump Station Associated with Force Main	**Force Main Asset Information**		
	Length (linear feet)	**Size (inches)**	**Material Type**
Lomita Park	2,310	8	Cast Iron
Crestmoor Dr.	500	6	Cast Iron
Crestwood Dr.	765	8	AC
Olympic Dr.	2,668	8	Cast Iron
Sharp Park Dr.	3,270	12	HDPE
Spyglass Dr.	2,172	6	AC
Total	**11,685**	**-**	**-**

Source: City GIS, May 2015

IV-2.4 Private Sewer Laterals

The City will provide maintenance for some lower laterals within the service area if a City approved cleanout has been installed at the property line. The City has a cleaning program for these City lower laterals. The maintenance frequencies are 3-month, 6-month, and 1-year based upon the condition of the lower lateral. As with sewer mains, cleaning frequencies are adjusted within the CMMS system based upon the historical results of each cleaning. In addition, the City will only provide lower lateral maintenance as long as the lower lateral does not require repair or replacement. I either of these situations appears, the property owner is notified and required to make the appropriate corrections. Once the work is completed and approved by the City if maintenance is required then the lower lateral will again be placed in this program. The private property owner has the full responsibility for the entire lateral if there is no approved cleanout and for the upper lateral if the approved cleanout has been installed.

The City reports all private sewer lateral SSOs as they become aware of a private lateral overflow.

IV-2.5 Chemical Root Treatment Program

The City annually utilizes a service contractor to chemical root foam between 3,000 and 6,000 linear feet of sewer lines as determined by field crews based upon cleaning results, SSOs and other available maintenance data from collection system operations. Some line segments are treated each year while other are treated every other year.

IV-2.6 Rehabilitation and Replacement Program

The City's Capital Improvement Plan for the next five (5) years was developed from the CCTV inspection and condition assessment program. All lines inspected were evaluated by the Master Plan consultant that evaluated the condition of all gravity sewers using the PACP structural and maintenance condition rating system for each line segment. The information gathered during the condition assessment was used to prioritize gravity sewers for repair/rehabilitation/replacement. The results were then placed into the five-year capital replacement program budget for pipelines, manholes, lower laterals, pump stations and force mains. The goal of the sewer capital program is to improve and/or replace existing facilities in an effort to extend the useful life of these valuable assets.[1] The CIP program is updated annually for projects that are completed and for changes resulting from fieldwork by the collection system crews. The sewer system capital projects are further described in detail in the City's Annual Capital Improvement Program Budget. The projects that are included in the **City's Capital Improvement Program are listed in Appendix IV-2**. The funds that support the Capital Improvement Program come from the City's sewer service charges that are based upon regular sewer service charge rate analyses. The City has developed a set of Wastewater Capital Improvement Program Guiding Principles that were developed during the preparation of the 2013 Sewer Master Plan. Those policies are as follows:

Wastewater Capital Improvement Program Guiding Policies

The Wastewater Enterprise Fund provides for the maintenance and implementation of capital improvements related to the safe and reliable collection and conveyance of sewage from San Bruno residents and businesses to the Water Quality Control Plant, jointly owned by San Bruno and South San Francisco and operated by South San Francisco. The San Bruno wastewater system consists of 85 miles of sewer mains, 2 miles of force mains, and six pumping stations. All wastewater is conveyed to the City of South San Francisco's Shaw Road Pump Station, from where it is pumped to the Water Quality Control Plant for treatment. Implementation of the Wastewater Capital Improvement Program is designed to protect, preserve, and enhance wastewater facilities

[1] San Bruno Sewer System Management Plan, August 2013, page 4-7

and to eliminate sanitary sewer overflows that impact public and environmental health. The overall goal is to improve and/or replace existing facilities to ensure wastewater system integrity and the continued safe transport and treatment of wastewater.

Capital investments in the wastewater system are driven by several City Council approved policies and plans, including:

- **Sewer System Master Plan** - A comprehensive planning document that evaluates the state of the City's wastewater infrastructure, and includes a 10-Year Work Plan to maintain, expand, and invest in the collection of mains and pump stations, and recommends specific infrastructure projects. Recommended projects are then considered for incorporation into the Capital Improvement Program. The Master Plan was updated and adopted in 2014.

- **Settlement Agreements** - In 2011, the San Francisco Regional Water Quality Control Board imposed a Cease and Desist order mandating certain improvements to the City's wastewater system and the City negotiated settlement of a lawsuit by San Francisco Baykeeper regarding sanitary sewer overflows (SSOs). Both have significant impacts on day-to-day maintenance requirements and capital investment. The Regional Board Cease and Desist Order include specific sewer system performance requirements and implementation of supplemental environmental programs. The agreement with San Francisco Baykeeper also addresses a range of programs to improve sewer system performance. The City is required to achieve significant reductions in sanitary sewer overflows by 2019 - limiting maximum SSOs to eight under the Regional Board agreement and a maximum of three under the Baykeeper agreement. Reducing SSOs to these levels requires aggressive capital investment to rehabilitate aging pumping stations and collection mains.

- **Wastewater Rate Study** – A financial model that calculates the rates required to maintain and operate the wastewater system according to the Master Plan and adopted Capital Improvement Program. The current rates are based on a 2012 rate study. An updated rate study will be completed during fiscal year 2015-16. The updated rate study will address sewer main repair and replacement requirements of the San Francisco Baykeeper Consent Decree along with project priorities identified in the adopted 2014 Sewer Master Plan.

- **Transit Corridors Plan** - A comprehensive plan for improvement of the downtown, and the areas immediately surrounding the Caltrain and BART stations. The Plan identifies improvements within the sewer collection system necessary to accommodate future development in the Transit Corridors area.

IV-2.7 Training

The WW Division has SOPs for sewer system response and mitigation, sewer cleaning (Vactor and rodder) equipment, mainline repair, pump station emergency response plans, confined space entry, Class B license requirement (standby duty), cell phone/two way radio use, and locating and marking USA.

Employee safety:

- Hold weekly meetings that usually include safety tailgate meetings on subjects that impact field working conditions and procedures and maintain sign-in logs.
- Present safe practice reminder at all meetings.
- Maintain compliance of OSHA safety rules.
- Review Material Safety Data Sheets (MSDS) for new chemical use.

Employee certifications and training:

- Employees receive and renew job specific certification for DMV, CPR, and First Aid, as required.
- Employees receive yearly training for the environmental and safety programs and others on a timeline required by OSHA found **Figure IV-5**. In addition, the Corp Yard provides competent person training on trenching, shoring, excavation, and SSO response/bypass pumping training.
- 10 to 12 employees are trained or provided refresher training in Confined Space Safety, Traffic Control, and Trenching/Shoring/Excavation at the competent person training level every two to three years.

Finally, the City will provide annual training on this SSMP and the OERP and will regularly conduct field exercises on emergency response procedures including SSO start times, volume estimation and recovery estimation. This training will also include presentation of issues from previous field inspections by the State and Regional Board especially the list of questions that they expect employees to be able to address regarding sewer system operation, maintenance and emergency response. Finally, the sewer staff regularly conducts tailgate sessions with the field crews.

Figure IV – 5: **City of Sab Bruno Public Services Training Matrix**

Annual (Cal/OSHA)
Blood-borne Pathogens
HAZMAT - Regulatory Compliance; Classification & Labeling of Chemicals (GHS)
Hazard Communication
Hearing Conservation / Testing
Respirator Fit Testing
Trenching / Shoring / Soil Excavation Awareness

Bi-Annual (Cal/OSHA)
Confined Space Certification
CPR / First Aid
Harassment Prevention - Supervisors Only
Traffic Zone Safety (Cones Class / Flagger Training)

Tri-Annual (Cal/OSHA)
Asbestos Awareness
Backhoe Operations
Competent Trenching / Shoring / Soil Class
Cranes & Other Hoisting Equipment
Fall Protection
Fire Extinguisher Operations
Forklift / Lift Truck Operations
Heat Illness Prevention
Locator Training
Lockout / Blockout / Tagout

Division-Specific Training
American Management Association & Management Training
California Water and Environment Association (CWEA) Conference & Training
Bay Area Clean Water Agency (BACWA) Training
Sewer cleaning efficiency enhancement
Various equipment and mechanical operations training as needed

IV-2.8 Equipment and Replacement Parts

The City's fleet maintenance department maintains high velocity jetsetters, rodder vehicles, mechanical rodding equipment, pumps, generators and the video inspection vehicle. Critical pipeline and pump station parts and spare equipment inventory are maintained by the Collection System Section. Critical equipment and miscellaneous spare parts inventory are included in the listing presented in Table IV – 9 below.

The list of the major equipment that City uses in the operation and maintenance of its sewer system is included in **Appendix IV-3: Major Sewer System Equipment Inventory**.

The City has developed a Critical Replacement Parts List. It has also developed a Replacement Parts Inventory procedure that is included in **Appendix IV-4: Critical Sewer System Replacement Parts Inventory**.

IV-2.9 Outreach to Sewer Service Contractors

The Building Division offers a comprehensive list of brochures that can be downloaded and printed out from the City's website (http://www.sanbruno.ca.gov/comdev_bldgBrochures.html). These brochures are also available at the Community Development Department in San Bruno City Hall located at 567 El Camino Real, San Bruno, CA 94066. The following are examples and copies are included in appendix 4-9.

- Re-pipe
- Sewer Repairs and cleanout installation
- Shower and tub installations
- Water heaters

The Engineering Division serves as the homeowners' and contractors' primary contact for construction activities within public right-of-ways such as sidewalk, streets and other city- owned property.

The City will be developing training guidance for all contractors and construction firms working in or near sanitary sewer facilities. In addition, the City will also develop standard specification language in all purchase orders and construction contracts that assure that service contractor employees working in the field are properly training and are aware of the City emergency response procedures for the sewer system. Finally, pre-construction conference agendas and construction progress meeting will include discussion of emergency response procedures for sewer system overflows.

IV-3 Element IV Appendices

Appendix IV-1: Sewer Cleaning Results Matrix

Table IV - 6: Sewer Cleaning results Matrix

Type of Debris	Clear	Light	Moderate	Heavy
Debris	No observable debris	Minor amount of debris 1 pass	Moderate amounts of debris 2-3 passes	Significant amounts of debris more than 4 passes. Operators concern for future stoppages.
Grease	No observable grease	Minor amounts of grease – 15 minutes or less to clean – 1 pass	Small "chunks" No logs – 15 – 30 minutes to clean – 2-3 passes	Big "chunks" or "logs". More than 4 passes. Operator concern for future stoppages.
Roots	No observable roots	Minor amounts of roots – 1 pass	Thin, stringy roots. No "clumps" – 2-3 passes	Thick roots. Large clumps. More than 4 passes. Operator concern for future stoppages.
Debris: structural pipe fragments, soil, rocks, etc.	No observable debris	Specify material (if possible) minor amounts of material	Specify material (if possible) moderate amounts of material	Specify material (if possible) significant amounts of material per line segment. Operator concern for future stoppage.
Action	Decrease frequency to next lower frequency after 3 consecutive results (e.g. 6 months to 12 months)	Continue current maintenance frequency.	Increase current maintenance frequency to next higher frequency (e.g. 6 months to 3 months or more frequently if necessary)	Increase current maintenance frequency to next higher frequency (e.g. 6 months to 3 months or more frequently if necessary)

Appendix IV-2: Renewal & Replacement Program Budget in $1000's

Table IV - 7: Renewal & replacement Program Budget in $1000's

Project	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20
Sewer Main Improvement and Replacement*	5,505	7,663	6,245	7,100	4,490
Wastewater Pump Station Improvement and Replacement**	1,100	900	4,800	0	0
Totals	**6,605**	**8,563**	**11,045**	**7,100**	**4,490**

***Sewer Main Improvement and Replacement Program**
Undertake the repair of sewer manholes and segments of pipelines in need of rehabilitation with current work efforts focused on Trenton Drive, Jenevein Avenue, San Mateo Avenue, Crystal Springs Avenue, Crestmoor Canyon, Avenues Project 1-1 and Avenues Project 1-2. Sewer pipe repairs and replacement will also occur along 1st Avenue as part of the completion of the Caltrain Grade Separation Project.

****Wastewater Pump Station Improvement and Replacement Program**
Replacement/Rehabilitation of the sewer pump stations throughout the City.

Appendix IV-3: Major Sewer System Equipment Inventory

Table IV - 8: Major Sewer System Equipment Inventory

Major Equipment Type	Year Purchased
Vactor 2100 Plus	2014
Vactor 2100	2013
Mechanical Rodder	1999
Lateral Response Maintenance Truck	2013
3 each – Honda field generators	2011
2 each – Lateral CCTV cameras	2014
Service Body Repair Truck	2009
5 yard dump truck	1995
Emergency Light Tower	2008
6” Emergency mobile pump	2011
2 each – 3” trash pumps	2010
Hose reel trailer	2011
Pump maintenance truck	2010
Arrow board truck	2003
4 each – Toughbook laptops	2010
Top kick mechanical snake	2013

* Equipment Inventory as of May 2015

Appendix IV-4: Critical Sewer System Replacement Parts Inventory

Table IV - 9: Critical Sewer System Replacement Parts Inventory

Part Description	Number in Inventory	Location
Trailer Mount Bypass Pump – 6 inch	2	Corporation Yard
Flow Through Sewer Plugs	2	Corporation Yard
Sewer Plugs	4	Corporation Yard
Lift Station Pumps	4	Corporation Yard
Portable Trash Pump – 3 Inch	4	Corporation Yard
Lay Flat Bypass Hose – 3 Inch	2,000 feet	Corporation Yard
Lay Flat Bypass Hose – 6 Inch	300 feet	Corporation Yard
Portable Generators	4	Corporation Yard
Containment Waddles	3 Pallets	Corporation Yard
Station Generator Control Boards	6	Corporation Yard

Last Inventory Date: 12/1/15

IV-4 References

- San Bruno Sewer Master Plan, RMC Environmental and Water, January 2014
- City of San Bruno Adopted 2015-2016 and 2015-2020 Five-Year Capital Improvement Program Budget
- Pump Station Emergency Response Plans (6 each)
- Code Enforcement Strategy Guide

Element V: Design and Performance Provisions

SWRCB Waste Discharge Requirement:

a) Design and construction standards and specifications for the installation of new sanitary sewer systems, lift stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and
b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

V-1 Sanitary Sewer Design Standards and Specifications

Chapter 12.44.080 of the Municipal Code, addresses design criteria for vitrified clay pipe, slopes of collector lines, laterals, minimum size for mains and other miscellaneous requirements.

Chapter 10.12.100 "Sewer connection permits", paragraph (d) of the MunicipalCode requires that all new sewers and connections to new and existing sewers shall be designed and constructed in accordance with the requirements of applicable city ordinances, the city standard plans and specifications and the California Building Code (SBMC Chapter 11.04) then in effect.

The Standard Specifications and Drawings of the Public Services Department of the City of San Bruno, August 2011, is the current version of the city standard plans and specifications. Part 1 includes Standard Requirements for all public projects undertaken within the City. Part 2 defines General Requirements. Part 3 details Technical Specifications and Part 4 includes Standard Drawings that individual components are to adhere to. Division 33 of the Technical Specifications covers the technical requirements for projects to construct utility projects. Section 33 30 00 covers the requirements for sanitary sewerage utilities. This section includes specifications for the design and construction for new sanitary sewer pipelines. Section 3.14 specifies requirements for the construction of new pumping facilities. This section also includes specifications for slip lining and pipe bursting that are used for the rehabilitation of existing sanitary sewer pipelines.

V-2 Procedures and Standards for Inspection and Testing of New and Rehabilitated Facilities

Section 33 30 00 states, "Any and all work to be performed on the Collection System shall be inspected and approved by City Staff." Section 33 3000 also include testing and acceptance requirements for individual elements of projects and testing requirements for newly constructed or rehabilitated pipelines including hydrostatic testing, mandrel testing, air testing and closed circuit television inspection of sewer lines.

V-3 References- Design and Performance Provision Documents

- Standard Specifications and Drawings of the Public Services Department of the City of San Bruno, August 2011
- California Building Code, San Bruno Municipal Code Chapter 11.04

Element VI: Overflow Emergency Response Plan

SWRCB Waste Discharge Requirement:

Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
b) A program to ensure an appropriate response to all overflows;
c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The Sewer System Management Plan (SSMP) should identify the officials who will receive immediate notification;
d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
f) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

(Ref. SWRCB Order No. 2006-0003-DWQ D.13.

VI-1 Purpose

The purpose of the City of San Bruno's Overflow Emergency Response Plan (OERP) is to support an orderly and effective response to Sanitary Sewer Overflows (SSOs). The OERP provides guidelines for City personnel to follow in responding to, cleaning up, and reporting SSOs that may occur within the City's service area. This OERP satisfies the

SWRCB Statewide General Waste Discharge Requirements (GWDR), which require wastewater collection agencies to have an Overflow Emergency Response Plan. All appendices references in this Element refer to the Appendices attached to the Sanitary Sewer Overflow and Backup Response Field Guide, 2013 by DKF Solutions, LLC.

VI-2 Policy

The City's employees are required to report all wastewater overflows found and to take the appropriate action to secure the wastewater overflow area, properly report to the appropriate regulatory agencies, relieve the cause of the overflow, and ensure that the affected area is cleaned as soon as possible to minimize health hazards to the public and protect the environment. The City's goal is to respond to sewer system overflows as soon as possible following notification. The City will follow reporting procedures in regards to sewer spills as set forth by the San Francisco Regional Water Quality Control Board (*SFRWQCB)* and the California State Water Resources Control Board (*SWRCB)***.**

VI-3 Goals

The City's goals with respect to responding to SSOs are:

- Work safely;
- Respond quickly to minimize the volume of the SSO with any needed resources;
- Eliminate the cause of the SSO;
- Prevent sewage system overflows or leaks from entering the storm drain system or receiving waters to the maximum extent practicable;
- Contain the spilled wastewater to the extent feasible;
- Minimize public contact with the spilled wastewater;
- Mitigate the impact of the SSO;
- Meet the regulatory reporting requirements;
- Evaluate the causes of failure related to certain SSOs; and
- Revise response procedures resulting from the debrief and failure analysis of certain SSOs.

VI-4 SSO Detection and Notification

Ref. SWRCB Order No. 2006-0003-DWQ D13. iv(a)

The processes that are employed to notify the City of the occurrence of an SSO include: observation by the public, receipt of an alarm, or observation by City staff during the normal course of their work.

The City operates six wastewater pump stations. In the event of any pump failure, the high level sensor activates the SCADA alarm system and the City is contacted. To prevent overflow, wastewater from the wet well can either be pumped into a vacuum truck for disposal to a nearby sanitary sewer manhole, or bypassed around the station into the sanitary sewer system.

VI-4.1 Public Observation

Public observation is the most common way that the City is notified of blockages and spills. Contact numbers and information for reporting sewer spills and backups are in the phone book and on the City's website: https://sanbruno.ca.gov/. The City's telephone number for reporting sewer problems is (650) 616-7160.

Normal Work Hours
When a report of a sewer spill or backup is made during normal work hours, Public Services administrative staff receives the call and collects information from the caller (e.g., name, location, telephone, etc.) and enters it into the Mainstar Computerized Maintenance Management System (CMMS). They then forward the service request to the Lateral Service Truck Crew or vactor crew who will respond.

After Hours
After hours calls roll over to a private answering service, and they will contact the Standby Personnel for the Wastewater Division who will respond with the vactor truck (s). They will also generate the work order in the CMMS and enter the results of the service request.

When calls are received, either during normal work hours or after hours, the individual receiving the call will collect the following information:

- Time and date of call
- Specific location of potential problem
- Nature of call
- In case of SSO, estimated start time of overflow
- Caller's name and telephone number
- Caller's observation (e.g., odor, duration, location on property, known impacts, indication if surface water impacted, appearance at cleanout or manhole)

- Other relevant information

Figure VI – 1 is an overview of receiving a sewage overflow or backup report.

VI-4.2 City Staff Observation

City staff conducts periodic inspections of its sewer system facilities as part of their routine activities. Any problems noted with the sewer system facilities are reported to appropriate City staff that, in turn, responds to emergency situations. Work orders are issued to correct non-emergency conditions.

VI-4.3 Contractor Observation

The following procedures are to be followed in the event that a contractor/plumber causes or witnesses a Sanitary Sewer Overflow. If the contractor/plumber causes or witnesses an SSO they should:

1. Immediately notify the City
2. Protect storm drains
3. Protect the public
4. Provide information to the City Maintenance Workers such as start time, appearance point, suspected cause, weather conditions, etc.
5. Direct ALL media and public relations requests to the City Manager

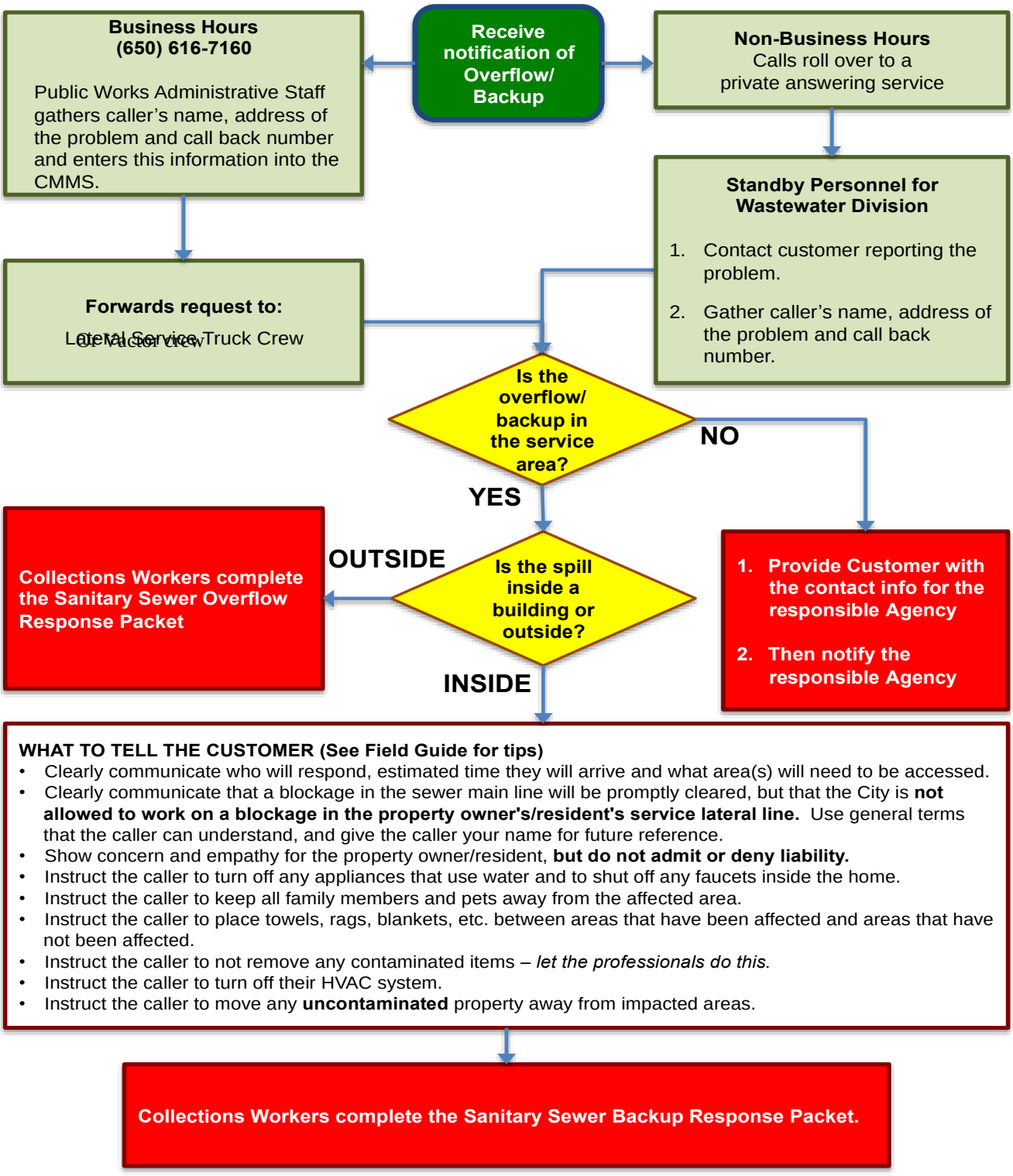


Figure VI – 1: Overview of Receiving a Sewage Overflow or Backup Report Procedure

VI-5 SSO Response Procedures

Ref. SWRCB Order No. 2006-0003-DWQ D13. (vi)(b)

VI-5.1 Sewer Overflow/Backup Response Summary

The City will respond to SSOs as soon as feasible following notification of an overflow/backup or unauthorized discharge. **Figure VI - 2** is an overview of the response activities.

VI-5.2 First Responder Priorities

The first responder's priorities are:

- To follow safe work practices.
- To respond promptly with the appropriate and necessary equipment.
- To contain the spill wherever feasible.
- To restore the flow as soon as practicable.
- To minimize public access to and/or contact with the spilled sewage.
- To promptly notify the Wastewater Division Lead Worker or Wastewater Division Manager in event of major SSO.
- To return the spilled sewage to the sewer system.
- To restore the area to its original condition (or as close as possible).

VI-5.3 Safety

The first responder is responsible for following safety procedures at all times. Special safety precautions must be observed when performing sewer work. There may be times when City personnel responding to a sewer system event are not familiar with potential safety hazards peculiar to sewer work. In such cases it is appropriate to take the time to discuss safety issues, consider the order of work, and check safety equipment before starting the job.

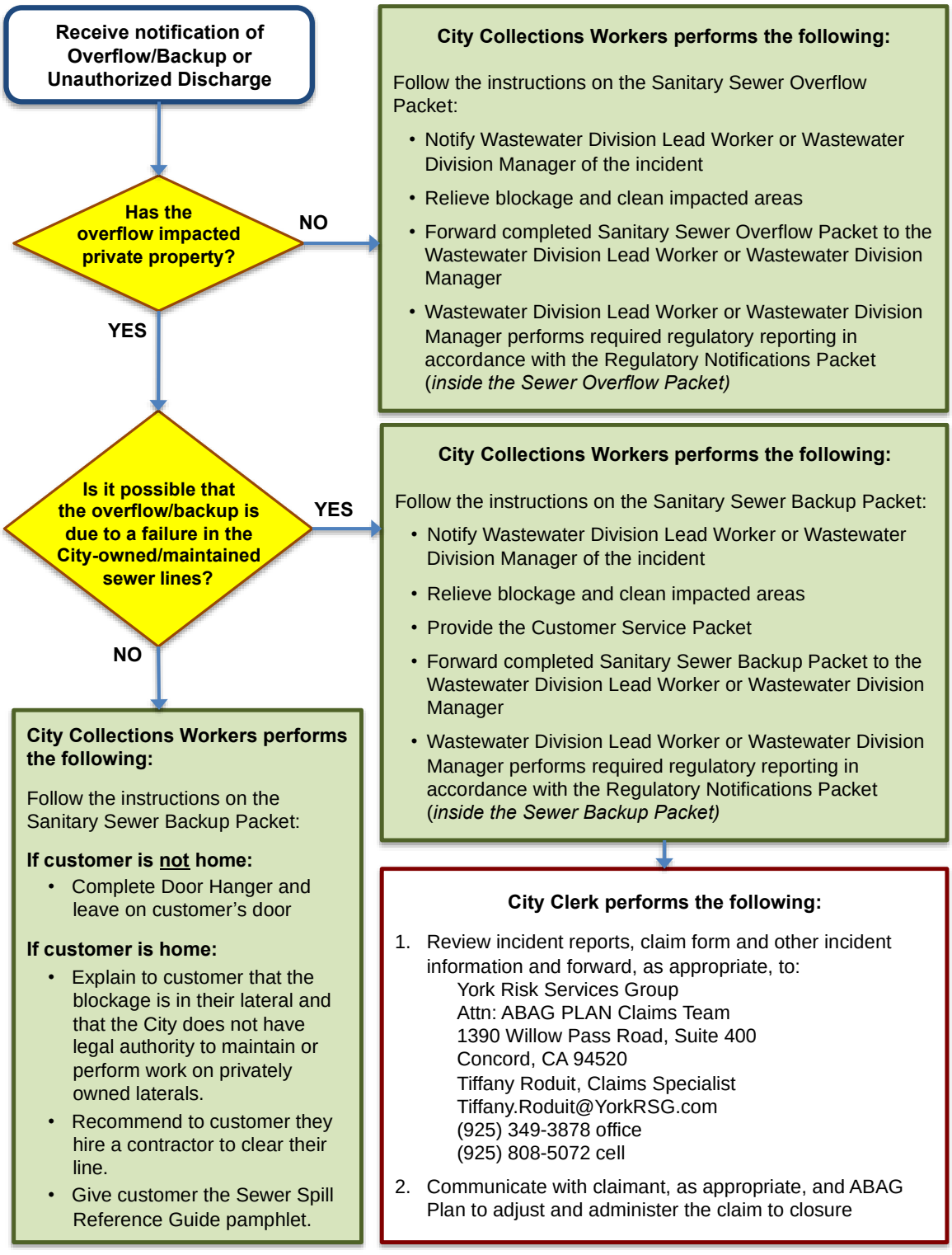


Figure VI - 2: Overview of the response activities

VI-5.4 Initial Response

The first responder must respond to the reporting party/problem site and visually check for potential sewer stoppages or overflows.

The first responder will:

- Note arrival time at the site of the overflow/backup.
- Verify the existence of a public sewer system spill or backup.
- Determine if the overflow or blockage is from a public or private sewer.
- Identify and assess the affected area and extent of spill.
- Contact caller if time permits.
- If the spill is large or in a sensitive area, document conditions upon arrival with photographs. Decide whether to proceed with clearing the blockage to restore the flow or to initiate containment measures. The guidance for this decision is:
    - Small spills (i.e., spills that are easily contained) – proceed with clearing the blockage.
    - Moderate or large spill where containment is anticipated to be simple – proceed with the containment measures.
    - Moderate or large spills where containment is anticipated to be difficult – proceed with clearing the blockage; however, whenever deemed necessary, call for additional assistance and implement containment measures.
- Take steps to contain the SSO. For detailed procedures refer to Appendix B: Sanitary Sewer Backup Procedures, and Appendix C: Sanitary Sewer Overflow Packet.

VI-5.5 Initiate Spill Containment Measures

The first responder will attempt to contain as much of the spilled sewage as possible using the following steps:

- Determine the immediate destination of the overflowing sewage.
- Plug storm drains using air plugs, sandbags, and/or plastic mats to contain the spill, whenever appropriate. If spilled sewage has made contact with the storm

drainage system, attempt to contain the spilled sewage by plugging downstream storm drainage facilities.

- Contain/direct the spilled sewage using dike/dam or sandbags.
- Pump around the blockage/pipe failure.

For detailed procedures refer to Appendix C: Sanitary Sewer Overflow Packet.

VI-5.6 Restore Flow

Using the appropriate cleaning equipment, set up downstream of the blockage and hydro-clean upstream from a clear manhole. Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not reoccur downstream. If the blockage cannot be cleared within a reasonable time from arrival, or sewer requires construction repairs to restore flow, then initiate containment and/or bypass pumping. For detailed procedures refer to Appendix C: Sanitary Sewer Overflow Packet.

VI-5.7 Equipment

This section provides a list of specialized equipment that may be used to support this Overflow Emergency Response Plan.

- *Closed Circuit Television (CCTV) Inspection Unit* – A CCTV Inspection Unit is required to determine the root cause for all SSOs from gravity sewers.
- *Camera* -- A digital or disposable camera is required to record the conditions upon arrival, during clean up, and upon departure.
- *Emergency Response Trucks* -- A utility body pickup truck, or open bed is required to store and transport the equipment needed to effectively respond to sewer emergencies. The equipment and tools will include containment and clean up materials.
- *Portable Generators, Portable Pumps, Piping, and Hoses* – Equipment used to bypass pump, divert, or power equipment to mitigate an SSO.
- *Combination Sewer Cleaning Trucks* -- Combination high velocity sewer cleaning trucks with vacuum tanks are required to clear blockages in gravity sewers, vacuum spilled sewage, and wash down the impacted area following the SSO event.
- *Air plugs, sandbags and plastic mats*
- *Portable Lights*
- *6" portable pump and hose reel trailer*

Standard operating procedures for equipment that may be necessary in the event of a sanitary sewer overflow or backup can be found in the Wastewater Division offices and vehicles.

VI-6 Recovery and Cleanup

Ref. SWRCB Order No. 2006-0003-DWQ D13.(vi)(e)

The recovery and cleanup phase begins immediately after the flow has been restored and the spilled sewage has been contained to the extent possible. The SSO recovery and cleanup procedures are:

VI-6.1 Estimate the Volume of Spilled Sewage

Use the methods outlined in the Sanitary Sewer Backup Packet (Appendix B), Sanitary Sewer Overflow Packet (Appendix C), and/or the Field Guide to estimate the volume of the spilled sewage. Wherever possible, document the estimate using photos and/or video of the SSO site before and during the recovery operation.

VI-6.2 Recovery of Spilled Sewage

Vacuum up and/or pump the spilled sewage and rinse water, and discharge it back into the sanitary sewer system.

VI-6.3 Clean-up and Disinfection

Clean up and disinfection procedures will be implemented to reduce the potential for human health issues and adverse environmental impacts that are associated with an SSO event. The procedures described are for dry weather conditions and will be modified as required for wet weather conditions. Where cleanup is beyond the capabilities of the City Maintenance Workers, a cleanup contractor will be used.

Private Property

City crews are responsible for the cleanup when the property damage is minor in nature and is outside of private building dwellings, such as in front, side and backyards, easements, etc. In all other cases, affected property owners can call a water damage restoration contractor to complete the cleanup and restoration. If the overflow into property is the definite cause of City system failure, the property owner can call out a water damage restoration contractor to complete the cleanup and restoration. In both cases, property owners may obtain a City claim form from the City Clerk.

Hard Surface Areas

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water and/or deozyme or similar non-toxic biodegradable surface disinfectant until the water runs clear. The flushing volume will be approximately three times the estimated volume of the spill. Take reasonable steps to contain and vacuum up the wastewater. Allow area to dry. Repeat the process if additional cleaning is required.

Landscaped and Unimproved Natural Vegetation

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water until the water runs clear. The flushing volume will be approximately three times the estimated volume of the spill. Either contain or vacuum up the wash water so that none is released. Allow the area to dry. Repeat the process if additional cleaning is required.

Natural Waterways

The Department of Fish and Wildlife will be notified by CalOES for SSOs greater than or equal to 1,000 gallons.

Wet Weather Modifications

Omit flushing and sampling during heavy storm events (i.e., sheet of rainwater across paved surfaces) with heavy runoff where flushing is not required and sampling would not provide meaningful results.

VI-6.4 Public Notification

Signs will be posted and barricades put in place to keep vehicles and pedestrians away from contact with spilled sewage. The Wastewater Division Manager will use his/her best judgment regarding sign placement in order to protect the public and local environment. Signs will not be removed until directed by the Wastewater Division Manager.

Creeks, streams and beaches that have been contaminated as a result of an SSO will be posted at visible access locations until the risk of contamination has subsided to acceptable background bacteria levels. The area and warning signs, once posted, will be checked every day to ensure that they are still in place. Photographs of sign placement will be taken.

In the event that an overflow occurs at night, the location will be inspected first thing the following day. The field crew will look for any signs of sewage solids and sewage-related material that may warrant additional cleanup activities.

When contact with the local media is deemed necessary, the City Manager or their designee will provide the media with all revelvant information.

VI-7 Water Quality

Ref. SWRCB Order No. 2006-0003-DWQ D13.(vi)(f)

VI-7.1 Waters of the State

The following Waters of the State are in the City of San Bruno's service area:

- San Francisco Bay
- Pacific Ocean
- San Bruno Creek

VI-7.2 Water Quality Sampling and Testing

Water quality sampling and testing is required for Category 1 SSOs of 50,000 gallons or greater to determine the extent and impact of the SSO. The water quality sampling procedures must be implemented within 48 hours and include the following:

- The first responders will contact Alpha Labs to collect samples as soon as possible after the discovery and mitigation of the SSO event.
- The water quality samples will be collected from upstream of the spill, from the spill area, and downstream of the spill in flowing water (e.g. creeks). The water quality samples will be collected near the point of entry of the spilled sewage.
- The samples shall then be brought to Alpha Labs for analysis.

VI-7.3 Water Quality Monitoring Plan

The City Water Quality Monitoring Plan will be implemented immediately upon discovery of any Category 1 SSO of 50,000 gallons or more in order to assess impacts from SSOs to surface waters. The SSO Water Quality Monitoring Program will:

1. Contain protocols for water quality monitoring.
2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.)
3. Require water quality analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.

4. Require monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy.

5. Within 48 hours of the City becoming aware of the SSO, require water quality sampling for ammonia and total and fecal coliform.

6. Observe proper chain of custody procedures.

VI-7.4 SSO Technical Report

The City will submit and certify an SSO Technical Report to the CIWQS Online SSO Database within 45 calendar days of the SSO end date for any SSO in which 50,000 gallons or greater are spilled to surface waters. The Wastewater Division Manager will supervise the preparation of this report and will certify this report. This report, which does not preclude the Water Boards from requiring more detailed analyses if requested, shall include at a minimum, the following:

Causes and Circumstances of the SSO:

- Complete and detailed explanation of how and when the SSO was discovered.
- Diagram showing the SSO failure point, appearance point(s), and final destination(s).
- Detailed description of the methodology employed and available data used to calculate the volume of the SSO and, if applicable, the SSO volume recovered.
- Detailed description of the cause(s) of the SSO.
- Copies of original field crew records used to document the SSO.
- Historical maintenance records for the failure location.

City's Response to SSO:

- Chronological narrative description of all actions taken by the City to terminate the spill.
- Explanation of how the SSMP Overflow Emergency Response Plan was implemented to respond to and mitigate the SSO.
- Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

Water Quality Monitoring:

- Description of all water quality sampling activities conducted including analytical results and evaluation of the results.
- Detailed location map illustrating all water quality-sampling points.

VI.8 Sewer Backup Into/Onto Private Property Claims Handling Policy

It is the policy of the City that a claims form shall be offered to anyone wishing to file a claim. The following procedures will be observed for all sewer overflows/backups into/onto private property:

- City Maintenance Workers will offer a City claim form irrespective of fault whenever it is possible that the sanitary sewer backup may have resulted from an apparent blockage in the City-owned sewer lines or whenever a City customer requests a claim form. The claim may later be rejected if subsequent investigations into the cause of the loss indicate the City was not at fault.
- It is the responsibility of the Maintenance Workers to gather information regarding the incident and notify the Wastewater Division Lead Worker or Wastewater Division Manager.
- It is the responsibility of the City Clerk to review all claims and to oversee the adjustment and administration of the claim to closure.

VI-9 Notification, Reporting, Monitoring and Recordkeeping Requirements

Ref. SWRCB Order No. 2006-0003-DWQ D13.(vi)(c)

In accordance with the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SSS GWDRs), the City of San Bruno maintains records for each sanitary sewer overflow. Records include:

- Documentation of response steps and/or remedial actions
- Photographic evidence to document the extent of the SSO, field crew response operations, and site conditions after field crew SSO response operations have been completed. The date, time, location, and direction of photographs taken will be documented.

- Documentation of how any estimations of the volume of discharged and/or recovered volumes were calculated including all assumptions made.

Regulator required notifications are outlined in Section VI-9.1 and Table VI – 1 on the following page.

VI-9.1 Regulator Required Notifications

For reporting purposes, if one SSO event of whatever category results in multiple appearance points in a sewer system, a single SSO report is required in CIWQS that includes the GPS coordinates for the location of the SSO appearance point closest to the failure point, blockage or location of the flow condition that cause the SSO, and descriptions of the locations of all other discharge points associated with the single SSO event.

Table VI - 1: Regulator required notifications

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION	Within two hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, the City will notify the California Office of Emergency Services (CalOES) and obtain a notification control number.	Call Cal OES at: **(800) 852-7550**
REPORTING	• Category 1 SSO: The City will submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. • Category 2 SSO: The City will submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date. • Category 3 SSO: The City will submit certified report within 30 calendar days of the end of month in which SSO the occurred. • SSO Technical Report: The City will submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. • "No Spill" Certification: The City will certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred. Collection System Questionnaire: The City will update and certify every 12 months.	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/) certified by the Legally responsible Official(s). All information required by CIWQS will be captured in the Sanitary Sewer Overflow Report. Certified SSO reports may be updated by amending the report or adding an attachment to the SSO report within 120 calendar days after the SSO end date. After 120 days, the State SSO Program Manager must be contacted to request to amend an SSO report along with a justification for why the additional information was not available prior to the end of the 120 days.
WATER QUALITY MONITORING	The City will conduct water quality sampling within 48 hours after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.	Water quality results will be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.
RECORD KEEPING	The City will maintain the following records: • SSO event records. • Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP. • Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters. Collection system telemetry records if relied upon to document and/or estimate SSO Volume.	Self-maintained records shall be available during inspections or upon request.

[1] In the event that the CIWQS online SSO database is not available, the Wastewater Division Lead Worker or Wastewater Division Manager will notify SWRCB by phone and will fax or e-mail all required information to the RWQCB office at (510) 622-2460 in accordance with the time schedules identified above. In such an event, the City will submit the appropriate reports using the CIWQS online SSO database when the database becomes available. A copy of all documents that certify the submittal in fulfillment of this section shall be retained in the SSO file.

[2] The City always has at least one LRO. Any change in the LRO(s) including deactivation or a change to contact information, will be submitted to the SWRCB within 30 days of the change by calling (866) 792-4977 or emailing help@ciwqs.waterboards.ca.gov.

VI-9.2 Complaint Records

The City maintains records of all complaints received whether or not they result in sanitary sewer overflows. These complaint records include:

- Date, time, and method of notification
- Date and time the complainant or informant first noticed the SSO or occurrence related to the call
- Narrative description describing the complaint
- A statement from the complainant or informant, if they know, of whether or not the potential SSO may have reached waters of the state
- Name, address, and contact telephone number of the complainant or informant reporting the potential SSO (if not reported anonymously)
- Follow-up return contact information for each complaint received (if not reported anonymously)
- Final resolution of the complaint with the original complainant
- Work service request information used to document all feasible and remedial actions taken

All service requests are entered into the City's Maintstar Computerized Maintenance Management System (CMMS). This information will be maintained for a minimum of five years whether or not they result in an SSO unless required to be kept longer by the Water Boards or City litigation.

VI-10 Post SSO Event Debriefing

Ref. SWRCB Order No. 2006-0003-DWQ D13.(vi)(d)

Every SSO event is an opportunity to evaluate the City response and reporting procedures. Each overflow event is unique, with its own elements and challenges including volume, cause, location, terrain, climate, and other parameters.

As soon as possible after Category 1 and Category 2 SSO events all of the participants, from the person who received the call to the last person to leave the site, will meet to review the procedures used and to discuss what worked and where improvements could be made in preventing or responding to and mitigating future SSO events. The results of the debriefing will be documented and tracked to ensure the action items are completed as scheduled.

VI-11 Failure Analysis Investigation

Ref. SWRCB Order No. 2006-0003-DWQ D13.(vi)(d)

The objective of the failure analysis investigation is to determine the "root cause" of the SSO and to identify corrective action(s) needed that will reduce or eliminate future potential for the SSO to recur or for other SSOs to occur.

The investigation will include reviewing all relevant data to determine appropriate corrective action(s) for the line segment. The investigation will include:

- Reviewing and completing the Sanitary Sewer Overflow Report (in Appendix B and Appendix C) and any other documents related to the incident
- Reviewing the incident timeline and other documentation regarding the incident
- Reviewing communications with the reporting party and witness
- Reviewing volume estimate, volume recovered estimate, volume estimation assumptions and associated drawings
- Reviewing available photographs
- Interviewing staff that responded to the spill
- Reviewing past maintenance records
- Reviewing past CCTV records,
- Conducting a CCTV inspection to determine the condition of all line segments immediately following the SSO and reviewing the video and logs,
- Reviewing any Fats, Roots, Oils, and Grease (FROG) related information or results
- Post SSO debrief records
- Interviews with the public at the SSO location

The product of the failure analysis investigation will be the determination of the root cause and the identification and scheduling of the corrective actions. The Collection System Failure Analysis Form (in Appendix B and Appendix C) will be used to document the investigation.

VI-12 SSO Response Training

Ref. SWRCB Order No. 2006-0003-DWQ D13.(vi)(d)

This section provides information on the training that is required to support this Overflow Emergency Response Plan.

VI-12.1 Initial and Annual Refresher Training

All City personnel who may have a role in responding to, reporting, and/or mitigating a sewer system overflow will receive training on the contents of this OERP. All new employees will receive training before they are placed in a position where they may have to respond. Current employees will receive annual refresher training on this plan and the procedures to be followed. The City will document all training.

Affected employees will receive annual training on the following topics by knowledgeable trainers:

- The City's Overflow Emergency Response Plan and Sanitary Sewer Management Plan
- Sanitary Sewer Overflow Volume Estimation Techniques
- Researching and documenting Sanitary Sewer Overflow Start Times
- Impacted Surface Waters: Response Procedures
- State Water Resources Control Board Employee Knowledge Expectations
- Employee Core Competency Evaluations on Sanitary Sewer Operations
- Water Quality Sampling Plan

The City will verify that annual safety training requirements are current for each employee, and that employees are competent in the performance of all core competencies. This will be verified through electronic testing, interviews and observations. The City will address, through additional training/instruction, any identified gaps in required core competencies.

Through SWRCB Employee Knowledge Expectations training the employee will be able to answer the following:

1. Please briefly describe your name and job title.
2. Please describe for us approximately when you started in this field and how long you have worked for your agency.

3. Please expand on your current position duties and role in responding in the field to any SSO complaints.

4. Please describe your SOPs used to respond/mitigate SSOs when they occur.

5. Describe any training your agency provides or sends you to for conducting spill volume estimates.

6. We are interested in learning more about how your historical SSO response activities have worked in the field. We understand from discussions with management earlier that you use the OERP from the SSMP. Please elaborate on how you implement and utilize the procedures in the plan.

7. Historically, before any recent changes, can you please walk us through how you would typically receive and respond to any SSO complaints in the field?

8. Can you tell us who is responsible for estimating SSO volumes discharged? If it is you, please describe how you go about estimating the SSO volume that you record on the work order/service request forms?

9. What other information do you collect or record other than what is written on the work order form?

10. Describe if and when you ever talk with people that call in SSOs (either onsite or via telephone) to further check out when the SSO might have occurred based on what they or others know? If you do this, can you tell us where this information is recorded?

11. We understand you may be instructed to take pictures of some sewer spills/backups into structures. Other than these SSOs, when else would you typically take any pictures of an SSO?

12. Please walk us through anything else you'd like to add to help us better understand how your field crews respond and mitigate SSO complaints.

VI-12.2 SSO Response Drills

Periodic training drills or field exercises will be held to ensure that employees are up to date on these procedures, equipment is in working order, and the required materials are readily available. The training drills will cover scenarios typically observed during sewer related emergencies (e.g. mainline blockage, mainline failure, and lateral blockage). The results and the observations during the drills will be recorded and action items will be tracked to ensure completion.

VI-12.3 SSO Training Record Keeping

Records will be kept of all training that is provided in support of this plan. The records for all scheduled training courses and for each overflow emergency response training event and will include date, time, place, content, name of trainer(s), and names and titles of attendees.

VI-12.4 Contractors Working On City Sewer Facilities

All construction contractors working on City sewer facilities will be required to develop a project-specific OERP, will provide project personnel with training regarding the content of the contractor's OERP and their role in the event of an SSO, and to follow that OERP in the event that they cause or observe an SSO. Emergency response procedures shall be discussed at project pre-construction meetings, regular project meetings and after any contractor involved incidents.

All service contractors will be provided, and required to observe contractor procedures. See Appendix D: Contractor Orientation.

VI-13 Authority

- Health & Safety Code Sections 5410-5416
- CA Water Code Section 13271
- Fish & Wildlife Code Sections 5650-5656
- State Water Resources Control Board Order No. 2006-0003-DWQ
- State Water Resources Control Board Order 2013-009-DWQ effective September 9, 2013

VI-14 References

- Sanitary Sewer Overflow and Backup Response Field Guide, 2013, DKF Solutions Group, LLC
    - Appendix A: Regulatory Notifications Packet
    - Appendix B: Sanitary Sewer Backup Packet
    - Appendix C: Sanitary Sewer Overflow Packet
    - Appendix D: Contractor Orientation

Element VII: Fats, Oils, and Grease (FOG) Control Program

SWRCB Waste Discharge Requirement:

Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:

a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
b) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
d) Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;
e) Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;
f) An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and
g) Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.

VII-1 Nature and Extent of FOG Problem

The City of San Bruno has approximately one hundred and fifty (150) food service establishments (FSE) currently discharging to the City sewer system. Each of these FSEs has been issued permits to discharge outlining the roles and requirements for these dischargers and to be responsible for the proper handling and disposal of all FOG related wastes. Each of these FSEs is inspected on a regular basis to assure compliance with the FOG requirements.

Prior to the Baykeeper consent decree approximately 50% of all SSOs were related to FOG challenges. The consent decree required the City to work closely with South San Francisco to further develop and improve the FOG Control Program including residential and commercial outreach, education of FSEs on best management practices (BMP), enhanced inspection and enforcement of FSE's that do not comply with the FOG requirements. The final FOG Program was required to be at least equivalent to the program required of South San Francisco. A result of the implementation of this Program shows significant reductions in SSOs from FOG.

The City of San Bruno FOG Control Program is a shared responsibility between San Bruno and South San Francisco Water Quality Control Plant. The responsibility of each agency is shown in **Table VII-1 Fog Control Program Roles and Responsibilities**. In addition, the two agencies have developed a Food Service Establishments Enforcement Response Plan. In general, the Superintendent or his/her designee of the South San Francisco Water Quality Control Plant is the authorized representative for all interactions with FSEs while San Bruno is responsible for final FSE enforcement actions and the cleaning and maintenance of all main line cleaning and FOG related pipeline activities. The two agencies jointly handle outreach and public communications through brochures and bulletins available at both agencies counters. South San Francisco provides FOG related information on their website for the public and commercial and industrial customers.

Table VII - 1 FOG Control Program Roles and Responsibilities

Focus Area	Activity	Responsible Agency	
		San Bruno	South SF
Commercial Sources	Focused FSE Program (permits, inspections		X
	Inspect GRD maintenance		X
	Develop common standards for GRD	X	X
	Require installation of GRD	X	X
	Inspection GRD installation	X	
	Identify FOG disposal sites and distribute to grease haulers		X
	Outreach to business	X	X
	Provide information re: FOG problems to City inspectors	X	
	Enforcement Actions		
	Admin letter, NOV, monetary penalties		X
	Administrative Orders, water meter shut-off	X	

Residential Sources	Optimize sewer cleaning	X	
	Repair/replace problem sewers	X	
	Prepare outreach materials		X
	Enforcement action	X	
Gather Information	Gather information for next SSMP audit/update	X	X

VII-2 FOG Public Education Outreach

San Bruno in conjunction with SSF has developed and support the following outreach programs pursued in the San Bruno service area.

(1) Commercial And Industrial Component

A significant component of the FOG program involves educating sewer users about the importance of managing grease waste. Food Service Establishments (FSEs) are provided with informational pamphlets upon renewal of their wastewater discharge permits. Multi-lingual BMP posters demonstrating proper grease waste management techniques are distributed during annual inspections. The SSF Environmental Compliance Program maintains a list of grease waste haulers, **Table VII -1** and cooking oil recyclers **Table VII – 2** that is provided to FSEs upon request. In 2011, FOG management pamphlets were distributed to the owners of all commercial and industrial property within South San Francisco with their sewer service charge notifications. The City may, at its discretion promote proper FOG management through partnerships with the Chamber of Commerce and other business organizations.

(2) Residential Component

A variety of FOG management outreach materials are available to the general public. Grease scrapers and biodegradable waste containers are distributed to residents at community events and in public buildings throughout the service area, free of charge. These items are printed with FOG control BMPs for households. Advertising was purchased at the Tanforan Movie Theater in San Bruno in 2013 and will continue to run in 2014. Around the winter holidays, posters and stickers describing proper oil disposal are handed out to retailers of turkey fryers. Multi-lingual door hangers are delivered to large, multi-unit dwellings and residences in areas where grease blockages have occurred. Materials and FOG information was distributed to eight local elementary schools in 2013. The City will provide BMPs and other FOG related information in the FOG section of the City of South San Francisco's website (www.ssf.net/2119/Outreach=Activities), Face Book, and Twitter.

Additionally, the City commits to:

- Publish an article in the garbage collection service newsletters
- Purchase additional screen time at local movie theaters
- Perform outreach at City sponsored events
- Distribute brochures to residential customers
- Distribute grease receptacles
- Continue to distribute educational materials to public schools.

These residential outreach commitments were initiated in the spring of 2012 and continue as needed.

VII-3 FOG Disposal Plan

The SSF Superintendent has developed plans for the proper disposal of all FOG related wastes and has developed a list of Grease Waste and Used Oil Haulers shown in Appendix VII-1. The SSF Environmental Compliance Inspectors through the FSE permitting program inspect and evaluate FSEs best management practices, waste disposal programs and proper equipment operations and maintenance during their regular inspection.

VII-4 Legal Authority for FOG Discharges

The San Bruno Municipal Code conveys the responsibilities for the FOG Control Program to the Superintendent of the SSF Water Quality Control Plant and the specific FSE discharge requirements established in the joint NPDES permit. All FOG discharge requirements are contained in the SSF municipal code Chapter 14.08 Sections .030, .210(b) and (c) and 15.12.060 including preliminary enforcement actions by SSF. Final formal enforcement actions are the responsibility of the City of San Bruno.

SSFs Environmental Compliance Program maintains a master listing of all FSEs in the San Bruno Service Area that is used to prioritize inspections, coordinate follow-up actions and maintain permit compliance. Permits are issued for a period of three years and Environmental Compliance staff coordinates renewals. New FSEs are identified using the business license applications at the City of San Bruno. As a new FSE is identified, the Environmental Compliance section will review and require the business to submit a permit application that will then be reviewed against the FOG Program requirements prior to issuing a discharge permit.

VII-5 Grease Disposal Devices, BMPs, Recordkeeping and Reporting Requirements

San Bruno requires all new FSEs to obtain discharge permits from SSF prior to discharging to the City sewer system. SSF reviews these permit applications for the need for grease disposal

devices or other grease limiting devices and will include necessary permit conditions on the FSE for equipment, BMPs and recordkeeping and reporting requirement. SSF has adopted the following BMPs for the FOG Control Program:

- A properly sized grease removal device should be in use.
- Grease removal device maintenance should be performed at regular intervals by trained operators and verified by management.
- Used cooking oil should be collected for recycling by a licensed hauler.
- Dry cleanup methods should be used for dish pre-washing as well as equipment and floor cleaning.
- A spill control plan should be in place. Absorbent materials should be available to aid in spill cleanup.
- Food grinders should be removed or kept out of service.
- Greasy waste should not be poured down any drain.
- Mats, filters and floors should be cleaned such that all wash water drains through a grease removal device.
- Employees should be trained on FOG handling BMPs.

VII-6 FOG Inspection and Enforcement Authority

(1) Applicability

Regulated FSEs include food production facilities not covered under the Pretreatment Program, institutional food-service establishments, full-service restaurants, fast food outlets, coffee shops and concessions associated with other businesses where food is prepared. Each is subject to periodic inspection. Whether or not a specific business qualifies as an FSE is ultimately up to the discretion of Environmental Compliance Inspectors.

(2) Program Standards

In prior years, inspections were performed on a three-year cycle. Beginning with calendar year 2011, FSEs are inspected every year. Where violations are discovered, remediation is required within 30 days. Violations include failure to implement applicable BMPs, failure to keep records of grease removal device cleaning, utilization of enzymes or emulsifiers in grease removal devices, operating without a valid wastewater discharge permit, and being shown to be the cause of an SSO.

(3) Enforcement

The City of South San Francisco follows the written FSE Enforcement Response Plan when addressing non- compliant FSEs. In case an SSO can be shown to have been caused by an FSE, depending on the severity and the underlying cause of the SSO, the City will, at a

minimum send the business owner a warning letter, a Notice of Violation or an Administrative Citation (with or without monetary penalties) describing the cause of the SSO that has been attributed to the FSE, the pertinent parts of the City's FOG Ordinance, and required remediation methods and corrective actions to comply. An FSE must acknowledge receipt of such a document within 30 days of its postmark. If the City determines that it is more appropriate, a Show Cause Hearing may be conducted or a case may be referred to the San Bruno City Attorney in lieu of the letter, NOV or citation previously described.

VII-7 FOG Cleaning Program Requirements – Hot Spot Cleaning

The City has established a hot spot cleaning program for pipeline segments that evidence cleaning problems that could result in SSO or system failures. The pipes included in the hot spot program are identified from results of the regular line cleaning and from the knowledge of the field crews. The results of line cleaning are rated according to the PACP maintenance grading system and from those ratings a determination of the frequency of the hot spot cleaning is made. The current hot spot frequencies are 2-week, one (1) month, three (3) month, six (6) months and one year. Pipeline segments are placed on or removed from the hot spot program based upon the results of the cleaning. A line segment is not removed from the hot spot program until at least three (3) consecutive cleaning results show the line is clear.

VII-8 FOG Characterization Assessment

The City utilizing its Maintstar maintenance management system, mapping systems and the results of system cleaning, to identify pipe segments that are experiencing FOG and/or maintenance problems. The pipe segments once identified are referred to the Engineering Division for evaluation and consideration for repairs, future improvement or modification if the problems are structural or operational. The line segments will be included in the CCTV condition assessment program for further internal observation and evaluation. If it is determined that repairs are required, they will be completed in priority order or added to the capital improvement program.

VII-9 References

- Food Service Establishments Enforcement Response Plan
- Consent Decree**,** Baykeeper, Inc. vs. City of San Bruno, United States District Court, Northern District of California, San Francisco Division Civil Case No. CV 10-00753 SC, Filed 9/27/11
- South San Francisco website

Appendix VII - 1: List of Grease Waste and Used Oil Haulers

Table VII - 2: Grease Waste Haulers

A-1 Septic tank Service	(510) 697-8083
Able Septic	(408) 377-9990
Ameriguard Maintenance Services	(800) 347-7876
Bay Pumping	(831) 320-5229
Blue Sky Bio-Fuels	(510) 868-9229
Burr Plumbing & Pumping	(408) 287-2877
Darling International, Inc.	(800) 473-4890
Got Grease	(415) 728-8766
Liquid Environmental Solutions	(866) 694-7327
Pioneer Liquid Transport	(800) 804-7327
R&D Grease Trap Cleaning	(707) 632-5827
Sacramento Rendering Co.	(800) 339-6493
Salinas Tallow	(800) 621-9000
San Jose Tallow	(408) 452-8777
Trap Recyclers Inc.	(408) 892-3824

Table VII - 3: Used Cooking Oil Haulers

Ameriguard Maintenance Services	(800) 347-7876
Blue Sky Bio-Fuels	(510) 868-9229
Darling International, Inc.	(800) 473-4890
Got Grease	(415) 728-8766
One More Time	(800) 624-5504
Salinas Tallow	(800) 621-9000

** This partial list is distributed only as a convenience. The City of South San Francisco does not endorse or promote any companies listed and will not be responsible for services rendered.*

Element VIII: System Evaluation and Capacity Assurance Plan

SWRCB Waste Discharge Requirement:

The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:

a. **Evaluation**: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;
b. **Design Criteria:** Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and
c. **Capacity Enhancement Measures:** The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
d. **Schedule:** The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the Sewer System Management Plan (SSMP) review and update requirements as described in Section D. 14.

VIII-1 System Evaluation - Collection System Master Plan

The City completed a revision of the San Bruno Sewer Master Plan by RMC Water and Environment (RMC) in January 2014 that updated the 2000 Sewer Master Plan and Infiltration/Inflow Study. The objective of this effort was to update the 2000 study and to comply with the requirements in the WDR for capacity assurance and the development of capital improvement needs for the short and long term in the collection system based upon pipeline condition assessments and capacity enhancements. Further the Sewer Master Plan

satisfies the requirements of the 2011 Cease and Desist Order by the San Francisco Regional Water Quality Control Board and the consent decree with the San Francisco Baykeeper. The Master Plan fulfills the requirements for condition assessment, development of a Capacity Assurance Plan and a long-range sewer system Capital Improvement.[3]

The Master Plan utilized the InfoWorks CS, fully dynamic hydraulic model supported by a GIS based modeling interface. The model included pipes ten inches and larger and a few smaller pipes considered to be trunk sewers. The model included approximately 20 miles of City lines or about 23% of the entire sewer system and two of the six City pump stations (Crestwood and Lomita Park). The model discharges at two locations to the South San Francisco trunk system on the way to that WQCP for treatment and effluent discharge. The City was divided into several sewer sheds from which existing and future sewage flows were added to the model and then routed through the collection system to determine both current and future capacity of the system. Additionally, the consultant conducted flow monitoring at 12 temporary locations in the City from January to March 2011 used to calibrate the model and to

From the hydraulic model the consultant was able to define areas that require current or future long range improvements to be able to handle the all projected flows for both dry and wet weather conditions according to certain design parameters identified here and in the Master Plan.

VIII-2 Design Criteria

The capacity-related design criteria in the Master Plan utilized a design rainfall event defined as a 10-year reoccurrence frequency, 24 hour duration storm with temporal rainfall distribution based upon guidelines established in the U.S. Department of Agriculture National Conservation Services publication Technical Release Number 55 "Urban Hydrology for Small Watersheds". The design storm is comparable to the most notable large rainfall events that have occurred in the San Francisco Bay Area over the past several years including the storms of December 11, 2005 and January 25, 2008.[4]

The Master Plan identified several areas where model flows either caused overflows or surcharged to within four feet of the manhole rim under peak wet weather flows for the above defined design storm.

[3] City of San Bruno Sewer Master Plan, January 2014, RMC Water and Environment, Page 1.
[4] IBID, Page 2

VIII-3 Capacity Enhancement Measures – Capital Improvement Program

Upon completion of the hydraulic model runs, the consultant prepared long range plans for both renewal and replacement and capacity enhancements of the City sewer system. The renewal and replacement program was previously defined in Element 4, Appendix IV – 2, Table IV -7. In addition, they prepared a 20-year capacity improvements plan to address significant structural and maintenance issues and aging infrastructure and pump station upgrades necessary to meet the current and future improvement needs. The 20-year plan was divided into three phases reflecting relative priorities for construction as follows:

- Phase I – years 1 to 5
- Phase II – years 6 to 10
- Phase III – year 11 to 20

The recommended projects for all three phases are included below in Figure VIII-1. Column 1 of the Table provides the status of each of the Phase I projects as of the date of these SSMP revisions. In addition, the last column of the Table also identifies the type of project as capacity related, rehabilitation or replacement for these first phase projects. Several of the Phase I projects have now been completed and are noted in the Table.

The Master Plan included estimates of all of the recommended improvements based upon bids for similar types of projects in 2013. All projects have been indexed to the ENR Construction Cost Index to allow the City to be able to update and evaluate project costs during the term of the long-range program. The City will be funding the capacity assurance program utilizing Sewer Enterprise Fund revenues principally from sewer services charges. The City conducts regular evaluation of rates and charges.

VIII-4 Schedule

The schedule for the current and future four years of the City's capacity enhancement projects is included in **Appendix IV-2**. The recommended list of projects from the three priority phases will be reviewed and revised annually as part of the City Annual Capital Improvement Program preparation and prioritization. All capital program projects are prepare according to the Wastewater Capital Improvement Program Guiding Policies described in Section IV – 2.6.

Table VIII - 1: Recommended Sewer System Capital Improvement Program, 2014 Sewer System Master Plan

Project ID [a]	Project Name	Est. Capital Cost	Avg. Annual CIP Budget/Project Type
Years 1-5			
C-1 – In progress	Crestmoor Canyon	$ 520,000	Capacity
C-4 – In progress	Jenevein Avenue Bypass	$ 770,000	Capacity
C-5B - Done	Kains Avenue Improvement	$ 1,700,000	Capacity
C-6– In progress	Crystal Springs Avenue	$ 2,190,000	Capacity
C-7 – In progress	San Mateo Avenue Bypass	$ 1,490,000	Capacity
R-1 – In progress	Trenton Easement Improvement	$ 2,360,000	Rehabilitation
P-1 – In progress	Olympic PS Renovation & Force Main replacement	$ 3,100,000	Rehabilitation
P-2 – In progress	Spyglass PS Improvement	$ 1,000,000	Rehabilitation
Done	Sewer Rehabilitation Based on Condition Assessment [b]	$ 11,000,000	Rehabilitation
Done	Sewer Spot Repair	$ 1,250,000	Rehabilitation
Done	Equipment Purchase	$ 600,000	Replacement
	Subtotal – Years 1-5	$ 26,000,000	$ 5,200,000
Years 6-10			
C-2	Crestwood Drive	$ 1,070,000	
C-3	Crestwood PS Influent Sewer	$ 280,000	
C-8	San Antonio Avenue	$ 810,000	
C-9	Crestwood PS Capacity Upgrade	$ 460,000	
	Other Pump Station Improvement	$ 2,000,000	
	Sewer Rehabilitation Based on Condition Assessment [b]	$ 30,000,000	
	Sewer Spot Repair	$ 650,000	
	Equipment Purchase	$ 600,000	
	Subtotal – Years 6-10	$ 36,000,000	$ 7,200,000
Years 11-20			
	Sewer Rehabilitation Based on Condition Assessment	$ 26,000,000	
	Additional Rehabilitation of Older Sewers	$ 44,000,000	
	Sewer Spot Repair	$ 500,000	
	Equipment Purchase	$ 1,000,000	
	Subtotal – Years 11-20	$ 71,500,000	$ 7,200,000
Total CIP		**$ 133,500,000**	**$ 6,700,000**

a. Projects within each phase are not prioritized.

b. Includes portions of the Avenues sewer replacement project (R-2).

VIII-5 References

- City of San Bruno Sewer Master Plan, RMC Water and Environment, January 2014
- City of San Bruno Adopted 2015-2016 and 2015-2020 Five-Year Capital Improvement Program Budget

Element IX: Monitoring, Measurement, and Program Modifications

SWRCB Waste Discharge Requirement:

The Enrollee shall:

a. Maintain relevant information that can be used to establish and prioritize appropriate Sewer System Management Plan (SSMP) activities;
b. Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
c. Assess the success of the preventive maintenance program;
d. Update program elements, as appropriate, based on monitoring or performance evaluations; and
e. Identify and illustrate SSO trends, including: frequency, location, and volume.

IX-1 Performance Measures

The City has established three categories of metrics to monitor and measure the effectiveness of the various elements of this SSMP and its success in terms of meeting its goals. Those metrics include the following categories of metric information:

- Sewer Information
- Sewer Maintenance
- SSMP Performance Measures

The Sewer Information will be used from field crew activities; results of field inspections of FOG by SSF, engineering analysis of sewer system needs and prioritizes, industry information, and technology developments in the water sector. This type of information will inform future reviews of the effectiveness of the implementation of the SSMP and will be used along with the other two categories.

The indicators that the City will use to measure the performance of its sewer maintenance and the effectiveness of its SSMP are:

- Total miles cleaned per year (Regular and Hot Spot) Feet/Miles
- Total miles CCTV inspected per year Feet/Miles
- Total miles chemical root treatment Miles per year
- Total miles of sewer Update annually
- Avg. high velocity cleaning per crew per day Feet

- Avg. mechanical rodding per crew per day — Feet
- Number of planned work orders completed — Per year
- Number of unplanned work orders completed — Per year

The metrics that the City will use to assess SSMP performance are as follows:

-

Table IX - 1: Total Volume of Spills Per Year

Total number of spills per year (all spills)		Number of spills		
Total volume of spills per year (all spills)		Total Gallons		
SSO Cause	Fats, Oil and Grease (FOG)	Number	%	Gallons
	Roots	Number	%	Gallons
	Debris	Number	%	Gallons
	Capacity (Wet weather)	Number	%	Gallons
	Vandalism	Number	%	Gallons
	Pipe Failure	Number	%	Gallons
	Pump station Failure	Number	%	Gallons
	Other	Number	%	Gallons
	Total	Number	%	Gallons

IX-2 Baseline Performance

The City has performance measures in place and it will evaluate its performance annually following the end of the fiscal year. The historical, or baseline, performance is shown separately for gravity mains/pump stations/force mains and lower laterals.

Table IX - 2: Gravity Sewer, Pump Station, and Force Main SSOs by Fiscal Year

FY	Gravity Sewer SSOs	Pump Station SSOs	Force Main SSOs
08/09	30	1	0
09/10	29	0	0
10/11	16	0	0
11/12	6	0	0
12/13	7	0	0
13/14	19	1	1
14/15	7	0	1
15/16	7	0	3

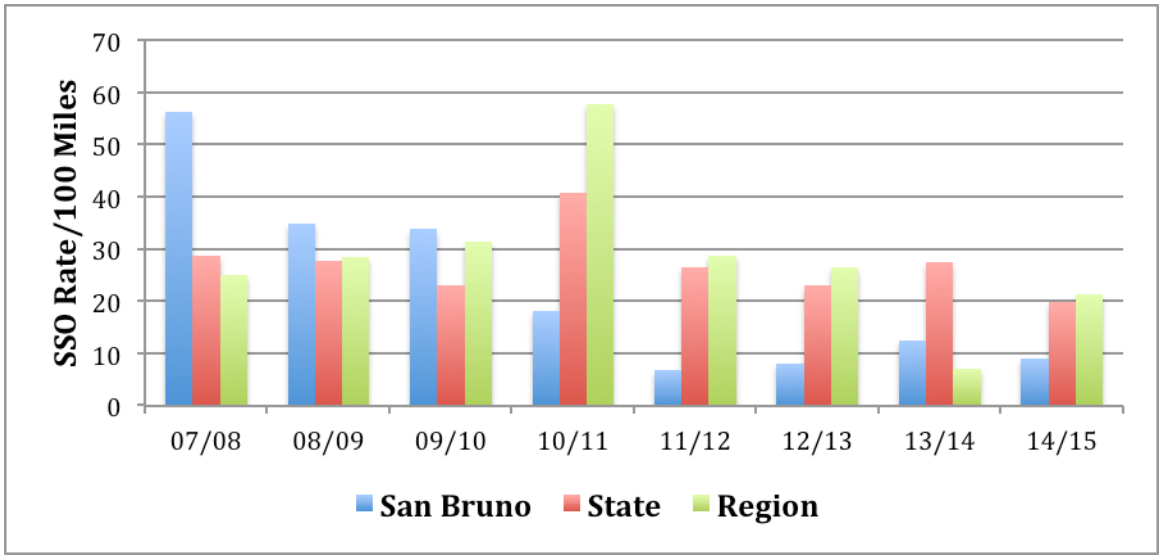


Figure IX - 1: Trend in Gravity Sewer, Pump Station, and Force Main SSOs

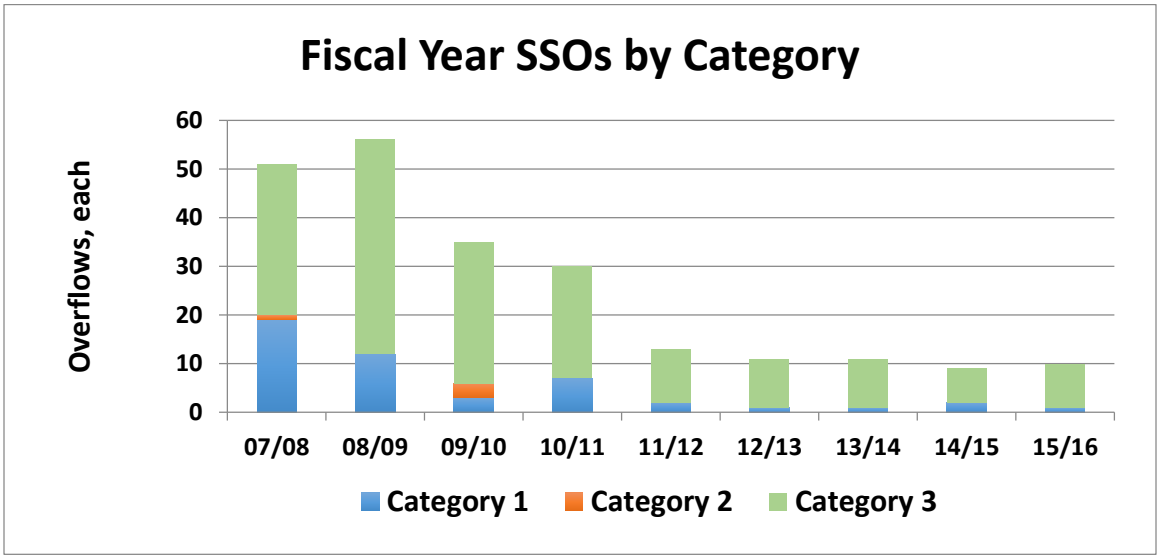


Figure IX - 2: Trend in SSOs by Category per Fiscal Year

Table IX - 3: FY Totals for SSOs by Cause

FY	FOG	Roots	Debris	Capacity	Vandals	Pipe Failure	PS Failure	Other	Total
07/08	20	14	6	8	1	1	0	2	52
08/09	14	7	30	1	0	1	1	2	56
09/10	12	5	10	1	1	2	0	4	35
10/11	5	5	13	3	0	3	0	1	3
11/12	2	3	8	0	0	0	0	0	13
12/13	1	3	3	0	1	3	0	0	11
13/14	0	1	5	0	1	0	1	3	11
14/15	0	1	5	1	0	1	0	1	9
15/16	0	1	3	1	0	4	0	1	10
Totals	54	40	83	15	4	15	2	14	227

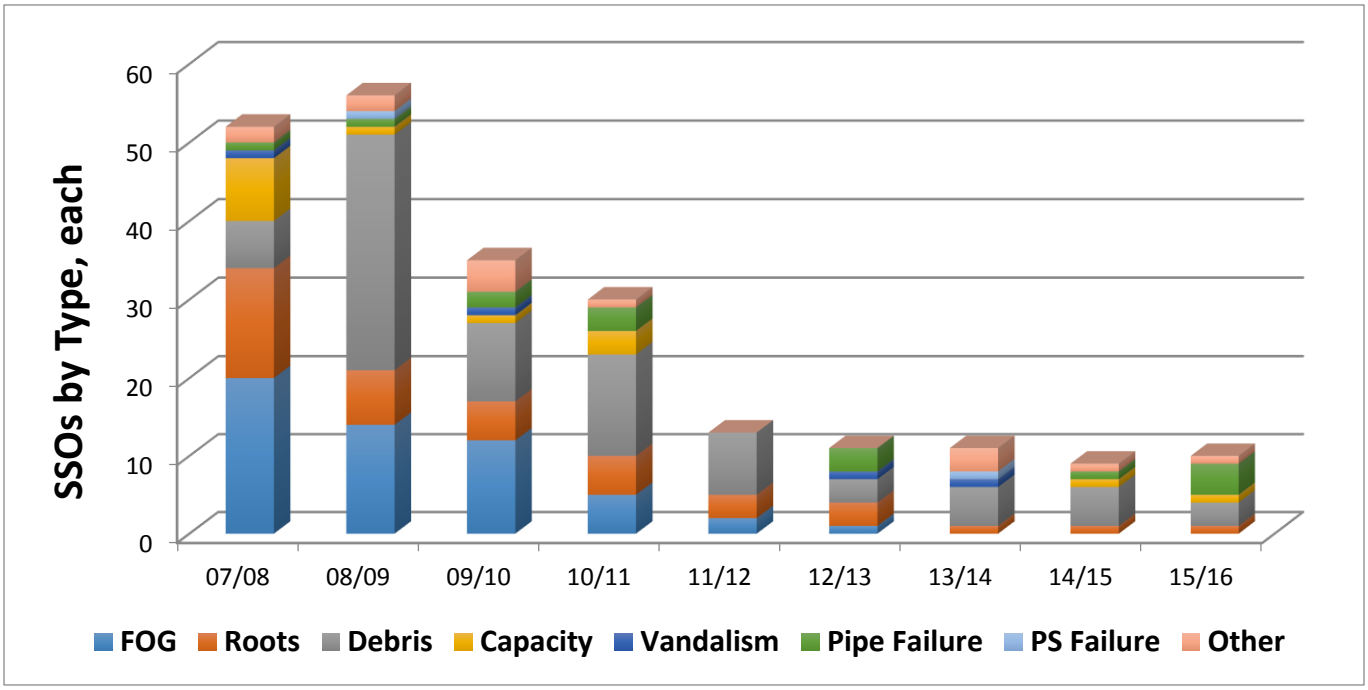


Figure IX - 3: Trend in Gravity Sewer, Pump Station and Force Main SSOs by Cause

Table IX - 4: FY Totals for Sewer Mains (Volume Spilled, Portion Contained, and Volume to Surface Waters)

FY	Total Volume Spilled, gallons	Portion Contained and Returned to Sewers, %	Total Volume Entering Surface Waters, gallons
07/08	1,592,388	0	1,586,825
08/09	21,408	53	9,802
09/10	102,749	81	17,915
10/11	18,222	6	17,050
11/12	892	43	20
12/13	1,397	45	800
13/14	2,355	80	360
14/15	23,605	64	8,250
15/16	17,452	87	2,000

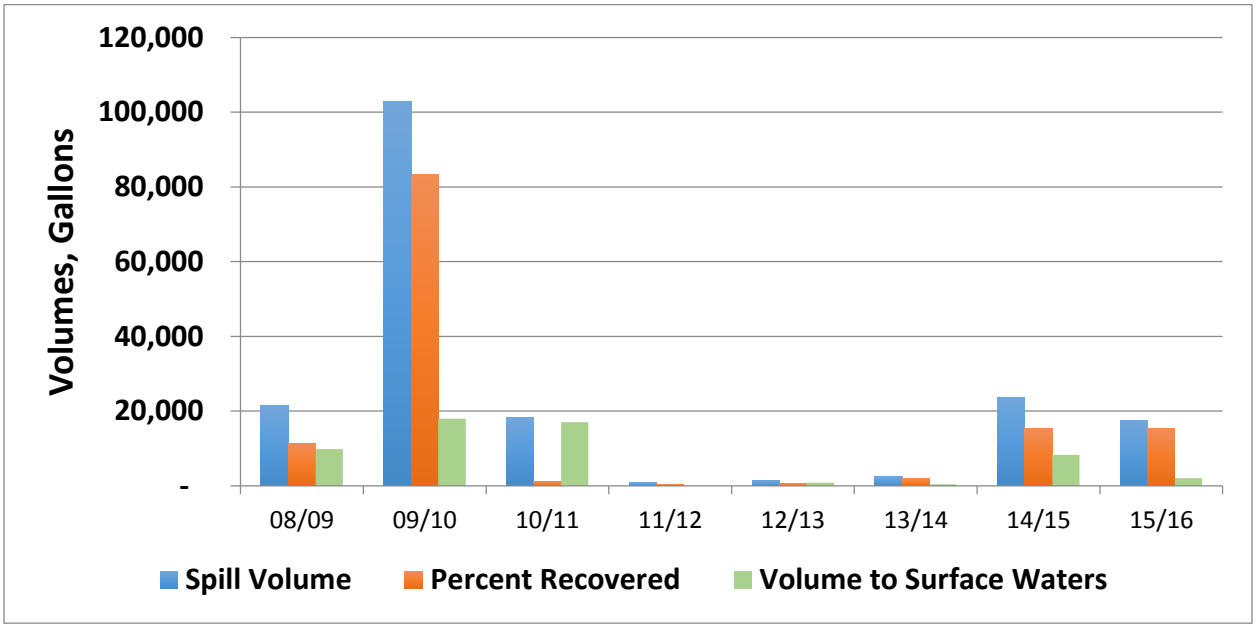


Figure IX - 4: Trend in Volume of Sewer Main Spills, Volume Reaching Surface Waters and Volume Recovered

IX-2.1 Lower Laterals

The baseline performance and trends in the performance measures of lower laterals is shown below.

Table IX - 5: Lower Lateral SSOs by Fiscal Year

FY	SSOs
08/09	25
09/10	5
10/11	14
11/12	7
12/13	4
13/14	0
14/15	1

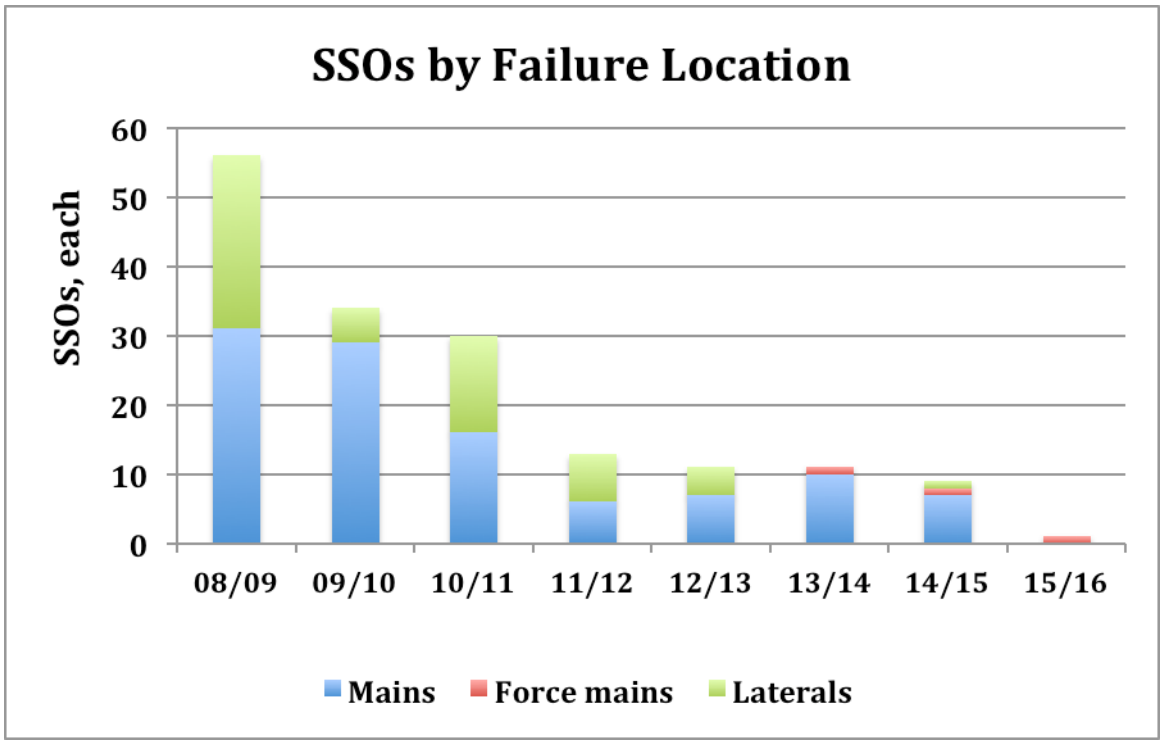


Figure IX - 5: Trend in Private Sewer Lateral SSOs

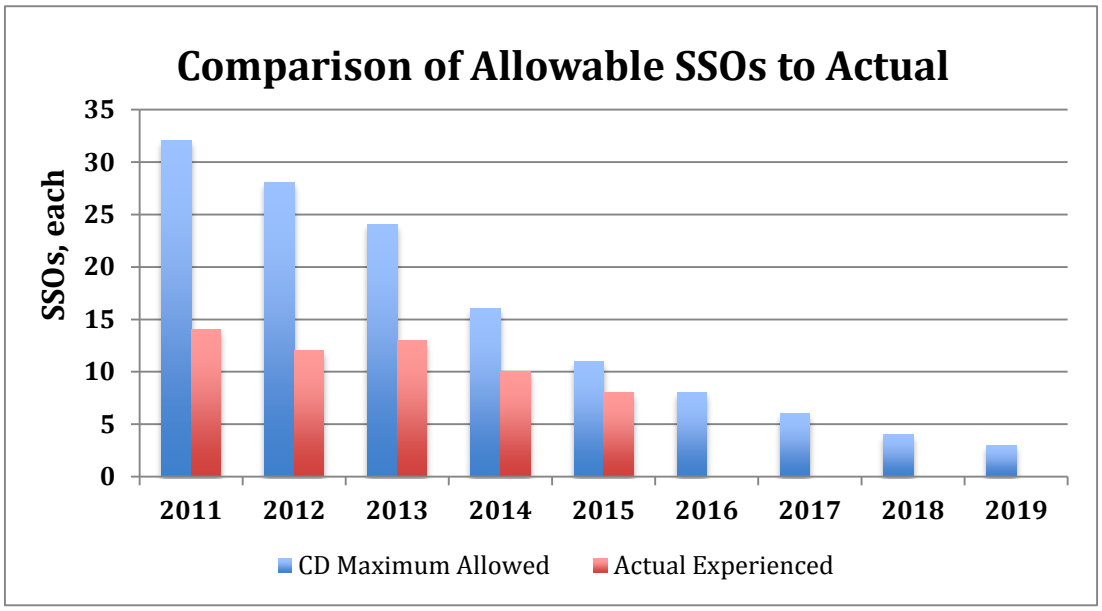


Figure IX - 6: Comparison of Consent Decree SSO Allowance to Actual

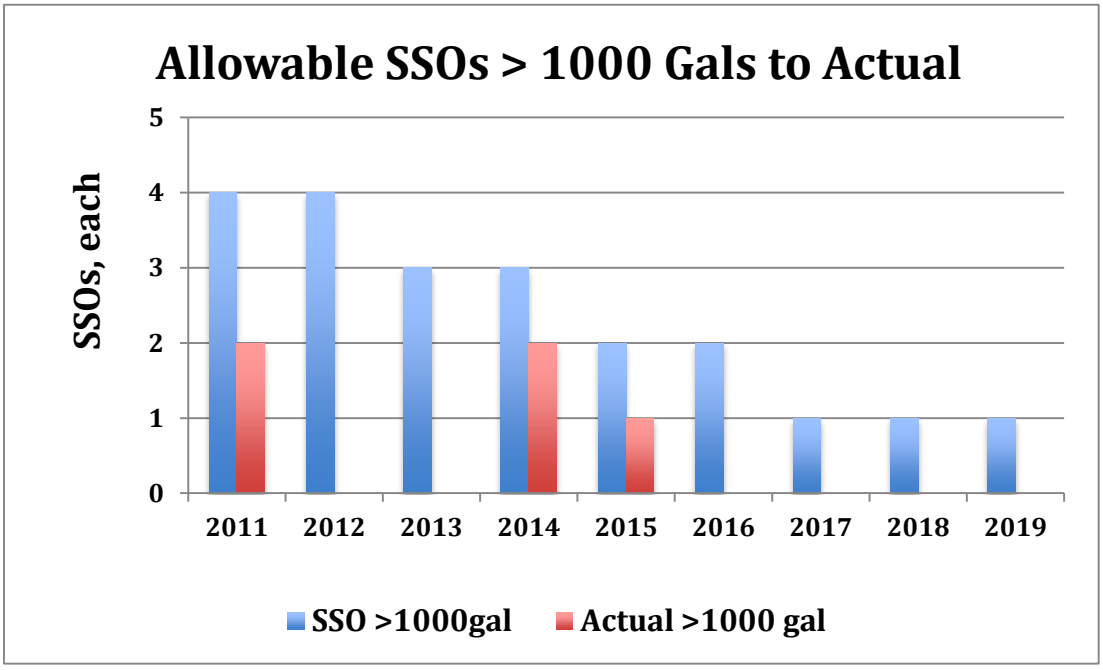


Figure IX - 7: Comparison of Consent Decree SSOs Greater than 1000 Gallons to Actual

IX-3 Performance Monitoring and Program Changes

The City will evaluate the performance of its wastewater collection system at least annually using the performance measures identified in this Element. The City will update the data and analysis at the time of the evaluation and will place the annual performance report in Appendix A of the SSMP.

The City may use other performance measures in its evaluation. The City will prioritize its actions and initiate changes to this SSMP, its operations and maintenance practices, and any related programs based on the results of the evaluation. This will be done as part of the self-audits (see Element X).

IX-1 References

The data used in this section were taken from the references:

- City records
- CIWQS SSO data as of October 26, 2015
- Settlement Agreement and Stipulation for Entry of Order, Order Number R2-2011-0044, Administrative Civil Liability Complaint No. R2-2010-0004
- California Regional Water Quality Control Board San Francisco Bay Region, Cease and Desist Order No. R2-2011-0051.

Element X: SSMP Program Audits

SWRCB Waste Discharge Requirement:

As part of the Sewer System Management Plan (SSMP), the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee's compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

X-1 Audits Procedures, Roles and Responsibilities

The Deputy Director for Utilities and Operations will perform periodic internal audits to determine the effectiveness of each element of the SSMP.

The Wastewater Services Manager will generate the following information and system metrics on annual bases for the purpose of tracking, monitoring and adjusting the performance of the SSMP activities.

- System Information
- Sewer Maintenance
- Performance Measures

The primary focus in the evaluation of the system metrics will be the elimination of preventable SSOs and reduction of the impacts of those SSOs that occur.

The City's audit and recertification schedule for the SWRCB is as follows:

- Every two years from the original adoption and approval date by the San Bruno City Council of the SSMP.
- Every five years from the original adoption and approval date by the San Bruno City Council and whenever significant program changes have occurred following the last Council certification.

The Sewer System Management Plan Audit Checklist (Table X-1) is used to guide the audit process and includes the GWDR requirements for each SSMP element. The results of the audit, including the identification of any deficiencies and the steps taken or planned to correct them will be included in a formal Audit Report. Upon completion of the audit, the City will include a copy of the report in Appendix A, Sewer System Annual

Audit Reports of this SSMP. Modifications and changes to the SSMP will be identified and tracked in Appendix B, SSMP Change Log.

The audit can contain information about successes in implementing the most recent version of the SSMP, and identify revisions that may be needed for a more effective program. Information collected can be used in preparing the audit. Tables and figures or charts similar to those in Element IX can be used to summarize information about these indicators. An explanation of the SSMP development, and accomplishments in improving the sewer system, should be included in the audit, including:

- How the sewer system implemented SSMP elements in the past year;
- The effectiveness of implementing SSMP elements;
- A description of the additions and improvements made to the sanitary sewer collection system in the past reporting period; and
- A description of the additions and improvements planned for the upcoming reporting period with an estimated schedule for implementation.

The City is also require by its consent decree to prepare and submit an Annual Report on stipulated activity during the preceding year to Baykeeper and to the Regional Board. These reports with be made available by hyperlink on the City website in the future.

X-2 SSMP Program Modification/Updates Process

The Wastewater Services Manager will monitor and review sewer performance metrics on an annual basis.

The Deputy Director will review the status of each of the elements of the SSMP on an annual basis. Formal SSMP audits will be conducted every two years following original adoption of the SSMP by the City Council.

The Public Services Director will initiate/direct corrective action to be taken when and if SSMP deficiencies are identified during periodic internal audits as part of the review and evaluation of SSO events and system performance results.

When significant changes are made to the SSMP that requires re-certification, the Legally Responsible Official (LRO) or his or her designee will enter the data in the online database and the LRO will certify the information to the State Water Board.

Table X - 1: SSMP Audit Checklist

The purpose of the SSMP Audit is to evaluate the effectiveness of the City of San Bruno SSMP and to identify any needed for improvement.			
Directions: Please check YES or NO for each question. If NO is answered for any question, describe the updates/changes needed and the timeline to complete those changes.			
		YES	NO
ELEMENT I - GOALS			
A.	Are the goals stated in the SSMP still appropriate and accurate?	☐	☐
Discussion:			
ELEMENT II - ORGANIZATION			
A.	Is the List of City Staff Responsible for SSMP current?	☐	☐
B.	Is the Sanitary Sewer Overflow Responder List current?	☐	☐
C.	Is Figure 2-1 of the SSMP, the City Organization Chart, current?	☐	☐
D.	Are the position descriptions an accurate portrayal of staff responsibilities?	☐	☐
E.	Is Table 2-2 in the Chain of Communication for Reporting and Responding to SSOs section accurate and up-to-date?	☐	☐
Discussion:			
ELEMENT III – LEGAL AUTHORITY			
Does the SSMP contain current references to the City of San Bruno Municipal Code documenting the City's legal authority to:			
A.	Prevent illicit discharges?	☐	☐
B.	Require proper design and construction of sewers and connections	☐	☐
C.	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the City?	☐	☐
D.	Limit discharges of fats, oils and grease?	☐	☐
E.	Enforce any violation of its sewer ordinances?	☐	☐
F.	Were any changes or modifications made in the past year to City Sewer Ordinances, Regulations or standards?	☐	☐
Discussion:			

ELEMENT IV – OPERATIONS AND MAINTENANCE			
Collection System Maps			
A.	Does the SSMP reference the current process and procedures for maintaining the City's wastewater collection system maps?	☐	☐
B.	Are the City's wastewater collection system maps complete, current and sufficiently detailed?	☐	☐
C.	Are storm drainage facilities identified on the collection system maps? If not, are SSO responders able to determine locations of storm drainage inlets and pipes for possible discharge to waters of the state?	☐	☐
Prioritized Preventive Maintenance			
D.	Does the SSMP describe current preventive maintenance activities and the system for prioritizing the cleaning of sewers?	☐	☐
E.	Based upon information in the Annual SSO Report, are the City's preventive maintenance activities sufficient and effective in minimizing SSOs and blockages?	☐	☐
Scheduled Inspections and Condition Assessments			
F.	Is there an ongoing condition assessment program sufficient to develop a capital improvement plan addressing the proper management and protection of infrastructure assets? Are the current components of this program documented in the SSMP?	☐	☐
Contingency Equipment and Replacement Inventory			
G.	Does the SSMP list the major equipment currently used in the operation and maintenance of the collection system and documents the procedures of inventory management?	☐	☐
H.	Are contingency and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?	☐	☐
Training			
I.	Does the SSMP document current training expectations and programs?	☐	☐
Outreach to Plumbers and Building Contractors			
J.	Does the SSMP document currently outreach efforts to plumbers and building contractors?	☐	☐
Discussion:			
ELEMENT V- DESIGN AND PERFORMANCE STANDARDS			

A.	Does the SSMP reference current design and construction standards for the installation for new sanitary sewer systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sanitary sewer systems?	☐	☐
B.	Does the SSMP document current procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and the rehabilitation and repair of existing sewer lines?	☐	☐
Discussion:			
ELEMENT VI – OVERFLOW AND EMERGENCY RESPONSE PLAN			
A.	Does the City's Sanitary Sewer Overflow Emergency Response Plan establish procedures for the emergency response, notification, and reporting of SSOs?	☐	☐
B.	Is City staff and contractor personnel appropriately trained on the procedures of the Sanitary Sewer Overflow Emergency Response Plan?	☐	☐
C.	Considering SSO performance data, is the Sanitary Sewer Overflow Emergency Response Plan effective in handling SSOs in order to safeguard public health and the environment?	☐	☐
D.	Are all SSO and claims reporting forms current or do they require revisions or additions?	☐	☐
E.	Does all SSO event recordkeeping meet the SSS GWDR requirements? Are all SSO event files complete and certified in the CIWQS system?	☐	☐
F.	Is all information in the CIWQS system current and correct? Have periodic reviews of the data been made during the year to assure compliance with SSS GWDR? Have all Technical Report and Water Quality Sampling requirements been met and uploaded to the CIWQS data management system?	☐	☐
G.	Was required training on SSMP and OERP completed and documented? Were field exercises with field staff on SSO volume estimation conducted and documented?	☐	☐

H.	Did all public improvement plans and specifications that could impact collection system operations include requirements for OERP training or were contractor OERP programs at least as stringent as the City OERP? Were regular items included in project meeting agendas to discuss emergency response procedures and communications?	☐	☐
Discussion:			
ELEMENT VII – FATS, OILS AND GREASE (FOG) CONTROL PROGRAM			
A.	Does the FOG Control Program include efforts to educate the public on proper handling and disposal of FOG?	☐	☐
B.	Does the FOG Control Program identify sections of the collection system subject to FOG blockages, establish a cleaning schedule and address source control measures to minimize these blockages?	☐	☐
C.	Are requirements for grease removal devices, best management practices (BMP), record keeping and reporting established in the City's FOG Control Program?	☐	☐
D.	Does the City have sufficient legal authority to implement and enforce the FOG Control Program?	☐	☐
E.	Is the current FOG program effective in minimizing blockages of sewer lines resulting from discharges of FOG to the system	☐	☐
Discussion:			
ELEMENT VIII- SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN			
A.	Does the Sanitary Sewer Strategic Plan evaluate hydraulic deficiencies in the system, establish sufficient design criteria and recommend both short and long term capacity enhancement and improvement projects?	☐	☐
B.	Does the City's Capital Improvement Plan (CIP) establish a schedule of approximate completion dates for both short and long-term improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity accomplishment?	☐	☐
Discussion:			

ELEMENT IX- MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS			
A.	Does the SSMP accurately portray the methods of tracking and reporting selected performance indicators?	☐	☐
B.	Is the City able to sufficiently evaluate the effectiveness of the SSMP elements based on relevant information?	☐	☐
C.	Were the consent decree and CDO performance metrics met?	☐	☐
Discussion:			
ELEMENT X – SSMP AUDITS			
A.	Will the SSMP Audit be completed, reviewed and filed in Appendix A?	☐	☐
Discussion:			
ELEMENT XI – COMMUNICATION PROGRAM			
A.	Does the City effectively communicate with the public and other agencies about the implementation of the SSMP and continue to address any feedback?	☐	☐
B.	Did the City Council receive and review the Annual Sewer System Report? Was the annual report uploaded to the City Sewer Section website and added to Appendix A?	☐	☐
C.	Did City staff conduct and document meetings with satellite collection systems? Are all agreements with satellite systems current or are changes necessary to these agreements?	☐	☐
Discussion:			
Change Log			
A.	Is the SSMP Change Log, current and up to date?	☐	☐
Discussion:			

Audit Team: _____ Date: _____

Prepared By: _____ Date: _____

Reviewed By: _____ Date: _____

Approved for Filing on:_____

X-3 References - None

Element XI: Communication Program

SWRCB Waste Discharge Requirement:

The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its Sewer System Management Plan (SSMP). The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee's sanitary sewer system.

XI-1 Communication during SSMP Development and Implementation

The City has developed a formal SSMP Communication Program that is included below in Appendix XI – 1. The Communication Plan outlines objectives for the messages for all stakeholders associated with or interested in the implementation and effectiveness of the sanitary sewer system. The objectives of the Communications Plan are:

- To develop a systematic approach for communicating SSMP requirements, progress, and performance
- To provide a channel for public input as the SSMP is developed and implemented.
- To communicate with enough frequency and information so that the SSMP is supported by the City Council, internal staff, the ratepayers, and other agencies.
- To inform internal and external stakeholders of the SSMP requirements and strategies to reduce sanitary sewer overflows (SSOs).
- To inform the City Council and the ratepayers of the SSMP successes in terms of City of San Bruno's SSO Reduction Program.
- To provide outreach to the community to inform them of the work the City is doing to reduce SSOs.

All emergency situations that require public notification and/or environmental protection with the media are handled directly by the City Manager or his/her designee.

The City, at least annually, communicates with the City Council at public meetings that allow

for input from the public with regard to the implementation and results of the collection system operations and effectiveness of the SSMP.

The City will also have brochures and information on collection system programs at various department counters in the City as well as available on the San Bruno and South San Francisco websites. Finally, the City provides information for property owners on their responsibilities for private sewer laterals operations, maintenance and replacement as well as time of sale requirements on the City website.

The City provides information for customers regarding plumbers available to assist with the maintenance of the private sewer facilities. In addition, the City had developed a Plumbers Hot Line that allows plumbers to contact the City prior to the maintenance of a private sewer lateral to assist with the disposal of all debris, roots and grease from the lateral cleaning operation at the next closest manhole downstream of the private lateral. This program protects the main line sewer system from the disposal of lateral debris that could cause blockages or overflows in the collection system downstream of the lateral maintenance.

XI-2 Availability of the SSMP and All Reference Documents

The City will make the SSMP and all reference documents identified in the SSMP available on the City website at https://sanbruno.ca.gov/. Any bid updates to the SSMP will be available on the City website within thirty (30) days of City Council approval and adoption or modification or significant change added to the SSMP Change Log, Appendix B. At that time all references shall be check and any changes or updates will also be appended to the webpage above.

XI-3 Communication with Satellite Wastewater Collection Systems

The City has no tributary or satellite systems and therefore has no communication program. The do however send all sewage to the San Bruno-South San Francisco Wastewater Quality Control Plant and rely on that agency for much of the FOG control Program. City staff conducts at least annual meetings with the Superintendent and appropriate staff of the treatment plant and both agencies coordinate directly on all necessary enforcement activities. See Element VII for a more in depth discussion of the roles and responsibilities of each of the agencies for the FOG Control Program.

XI-4 References - None

Appendix XI-1: City of San Bruno's SSMP Communication Program

Introduction

The overall goal of San Bruno's communications plan and its objectives are to deliver key messages to the various stakeholders regarding the City's Sewer System Management Plan (SSMP) and status of its implementation.

Goal

Communicate key messages about the City's Sewer System Management Plan (SSMP) to the following stakeholders:

- City Council
- Internal staff
- City's rate payers
- Regulatory agencies and Non-Governmental Organizations (NGOs) as needed

Objectives

Communications objectives are:

- To develop a systematic approach for communicating SSMP requirements, progress, and performance.
- To provide a channel for public input as the SSMP is developed and implemented.
- To communicate with enough frequency and information so that the SSMP is supported by the City Council, internal staff, the ratepayers, and other agencies.
- To inform internal and external stakeholders of the SSMP requirements and strategies to reduce sanitary sewer overflows (SSOs).
- To inform the City Council and the ratepayers of the SSMP successes in terms of City of San Bruno's SSO Reduction Program.
- To provide outreach to the community to inform them of the work the City is doing to reduce SSOs.

Key Messages

Key messages will focus on the City's SSMP requirements and actions being taken by the City to protect the public health, the environment.

The following key messages will be considered:

- Purpose of SSMP, requirements and status of City's program
- Protection of public health.
- Protection of the environment and the water quality.
- Status of City's SSOs.
- Channel for public input.
- Best Management Practices (BMPs) for residential and commercial customers.
- Wastewater collection system improvements such as replacement of existing pipeline and pumping station infrastructure and construction of new infrastructure.
- Maintenance and operation activities that led to reductions in the number and volume of SSOs.
- Potential rate impacts

Communication Strategies

Strategies that may be used for communication will include some or all of the following:

- Create Public Services news letter
- Post information on the City's website
- Public outreach meetings
- Use of local radio station and news paper
- Informational brochures and flyers
- Bill stuffers
- City Council SSMP status reports
- Link to State Water Resources Control Board (SWRCB) Sanitary Sewer Overflow Program web-site and
- Power Point presentations, written and verbal reports to City Council, customers and the public

Stakeholders and Communications Strategy

1. City Council - Strategy

Staff will provide reports to the City Council in terms of SSMP requirements, resources needed, and completed activities and reduction of SSOs.

These reports will include the following as appropriate:

- Purpose of SSMP
- Status of City's overall program.

- Progress of the Operations and Maintenance staff on meeting performance metrics related to the SSMP requirements and reduction of SSOs.
- FOG control measures in terms of residential and commercial BMPs and source control.
- Customer service in terms of: 1) response time to mitigate SSOs, 2) reduction in the number and quantity of SSO spills, and 3) improved customer satisfaction.
- Capital improvement projects.
- Proposed rate increases.

2. Internal Staff - Strategy

City management will educate staff on the GWDR SSMP requirements and their role and respective responsibilities in implementing various elements of the SSMP.

The internal staff training should include the following:

- Overall understanding GWDR purpose.
- Specific understanding of each of the eleven SSMP elements.
- Roles and responsibilities for SSMP elements addressed in their work classification/assignments.
- Periodic reports on the progress in reducing SSOs

3. Ratepayers - Strategy

City staff will provide relevant information about the SSMP and SSO Reduction Program to rate payers and provide a channel for public input.

The ratepayer/public information may include the following:

- Purpose of SSMP
- Status of Agency's overall program.
- FOG control measures in terms of residential and commercial BMPs and source control.
- Capital improvement projects (CIP).
- Possible rate impacts and any proposed rate increases.

4. Regulators and NGOs - strategy

Staff will communicate with Regulatory Agencies as required. The following tools can be used to achieve this requirement:

- Joint Power Agreement
- Inter-Agency Agreement
- Mutual Aid Agreement
- Periodic meetings to review the City' s program, progress in reducing SSOs, compliance issues related to the satellite system, and possible rate impacts
- The City's will communicate the status of their SSMP to SWRCB by certifying each completed element of their SSMP in the California Integrated Water Quality System (CIWQS).
- The City will report the number and size of SSOs, causes for each SSO, and steps that are being taken to reduce those SSOs to the State's CIWQS database.
- The same SSO information will also be communicated to San Francisco Regional Water Quality Control Board (RWQCB).

Table XI -1 provides a summary stakeholder communication strategies. What their areas of interest are and who may be best to communicate the specific message. It identifies the appropriate communication timeline and types of actions to best communicate with specific stakeholders:

Table XI - 1: SSMP Communications Strategies

Stakeholder	Areas of Interest	Strategy	Who	Timeline	Actions
City Council	Environmental Stewardship	Council information updates	Management	Annually	Power-point Presentation
	Rates and fees	Briefings with Council	Management	Annually	Workshop
	SSO Performance Targets	Briefings and reports	Operations Staff	Semi-Annually	Web Site and Annual Report
Internal Staff	Policies, Ordinances, Overview of WDR and SSMP Requirements	Council Meetings, SSO Reduction, Progress Reports and Staff meetings	Management & Legal Staff, Industrial Pretreatment Staff Management	Quarterly Semi-Annually and Annually	Web Site, News Letter, and Power-point Presentation
	SSMP elements and employee Roles and Responsibilities	Training Sessions	Management, Supervisory staff And Consultants	As Needed	Informal and Formal training
Ratepayers And NGOs	SSMP Status SSOs/100 Mi	City Web Site News letter	Management Communications Staff,	Continually Semi-Annually	Web Site, News Letter, Brochures, door hangers and Billing Inserts
	FOG control	Brochure/bill stuffers	Industrial Pretreatment Staff	As Needed	BMP
	CIP Rates and fees Capacity limits Restrictions and/or requirements	News Letter Bill stuffers, Newsletter and Web Site Agreements	Engineering Public Information Staff Industrial Pretreatment Staff	As Needed and required Annually	Articles Public outreach meetings and annual report Meetings
Regulatory Agencies	SSMP Compliance, SSO status and Catastrophic events	CIWQS, Reports and Audits	Management and Legally Responsible Official (LRO)	As Needed and Annually	Electronic and Written reporting, Telephone Communication and Meetings

Appendices

Appendix A: Sewer System Management Plan Audit Reports

City of San Bruno Public Services-Wastewater Division

SSMP Audit Checklist

Audit Date: March 12, 2010

Audit Team Members: Robert Howard, Dennis Bosch

Section	Title	Requirement	SSMP Implemented? Y or N Comments
1	Goals	Reduce, prevent, and mitigate SSOs	Public Services Department mission as related to its Wastewater Division is to meet requirements and reduce, prevent, and mitigate SSOs.
2	Organization	Names of Agency staff responsible for development, implementation, and maintenance of SSMP	1.) Klara Fabry 2.) Robert Howard 3.) Dennis Bosch
		Names and phone numbers for key Agency staff	On record at facility.
		Chain of communication for reporting SSOs	Chain of communication is in place and understood.
		Designate LRO(s)	1.) Dennis Bosch 2.) Robert Howard
		Chain of communication for reporting SSOs	Chain of communication is in place and understood.
3	Legal Authority	Ability to prevent illicit discharges to sanitary sewer system	Ordinances are in place.
		Ability to require sewers and connections be properly designed and constructed	Resolution 1986 is in place.
		Ability to ensure access for inspection, maintenance, and repairs (includes public portion of lateral)	Emergency access is assured by existing police ordinance code.

Section	Title	Requirement	SSMP Implemented? Y or N Comments
		Ability to limit discharge of FOG and debris that may cause blockages	Joint owned POTW completes FOG program for the City.
		Ability to require the installation of grease removal devices	Fog rules and ordinances are in place. If compliance issues present problems 1) an updated ordinance with minor modification can be implemented and 2) a much stronger ordinance is in Final Draft form.
		Ability to inspect FOG producing facilities	Joint owned POTW does inspections within our City.
		Ability to enforce violations of the City's sewer ordinances	Ordinances are in place.
4	O&M Program	Maintain up-to-date maps of the sanitary sewer system	Maps are current and constantly updated. All sewer related maps are in a GIS format
		Describe routine preventive maintenance program	1.) Hydraulic Jetting 2.) Vactor cleaning 3.) Mechanical Rodding 4.) Chemical root treatment
		Document completed preventive maintenance using work order system	New CMMS system is in final stages with the major elements being GIS maps and CMMS data downloaded into system. Collections system information inputted and work orders generated.

Section	Title	Requirement	SSMP Implemented? Y or N Comments
		Rehabilitation and replacement plan that identifies and prioritizes sanitary sewer system facilities	Plan is documented in the City's CIP program and wastewater rate analysis. All assets in the collection system have been identified and provided an identification number. Renewal and replacement data is completed for all sanitary pumping stations and a study of the collections system including underground assets is compete providing a total current replacement value. CCTV provides more information about the sanitary sewer system.
		CIP showing the schedule for rehabilitation and replacement projects	Schedule is documented in CIP Program and levels of services approved by City Council during wastewater rate presentations and hearings
		Provide regular technical training for City sanitary sewer system staff	Technical training is provided.
		Require contractors to provide training for their employees who work in the City's sanitary sewer system facilities	Will need to ensure this is being done by all Public Works staff when contractors are working in the City's sanitary sewer system facilities
		Maintain equipment inventory	Yes.

Section	Title	Requirement	SSMP Implemented? Y or N Comments
		Maintain critical spare part inventory	Division does maintain a small spare parts inventory. Has contact with vendors for just in time parts inventory
5	Design and Performance Provisions	Design and construction standards for new sanitary sewer system facilities	Buried Pipe Design with new standards from ASTM, AWWA, AASHTO and TRB; Excavation & Grading Handbook Revised; Uniform Plumbing Code; and 2007 California Plumbing Code texts are next to the SSMP binders.
		Design and construction standards for repair and rehabilitation of existing sanitary sewer system facilities	Buried Pipe Design with new standards from ASTM, AWWA, AASHTO and TRB; Excavation & Grading Handbook Revised; Uniform Plumbing Code; and 2007 California Plumbing Code are next to the SSMP binders.
		Procedures for the inspection and acceptance of sanitary sewer system facilities	Inspectors, Engineers and Divisional staff complete inspections.
6	OERP	Procedures for the notification of primary responders	Procedures are in place.
		Procedures for the notification of regulatory agencies	Procedures are in place.
		Program to ensure appropriate response to all SSOs	Procedures are in place
		Proper reporting of all SSOs	Proper reporting is done.
		Procedure to ensure Agency staff are aware of, are trained, and follow OERP	Procedures are discussed at weekly meetings.

Section	Title	Requirement	SSMP Implemented? Y or N Comments
		Procedure to ensure contractor personnel are aware of, are trained, and follow OERP	Will need to ensure this is being done by all Public Works staff when contractors are working in the City's sanitary sewer system facilities
		Procedures to address emergency operations such as traffic and crowd control	Standard safety procedures are in place.
		Program to prevent the discharge of sewage to surface waters	Preventative maintenance and response procedures are in place.
		Program to minimize or correct the impacts of any SSOs that occur	Procedures and response equipment are in place.
		Program of accelerated monitoring to determine the impacts of any SSOs that occur	The City has CCTV, CMMS, asset analysis, sanitary pumping station audit, smoke testing and planned more aggressive O&M and pipe replacement program. For 2009 there was sampling and testing of the City's stormwater's discharge channel, called Cupids Row Canal. In early 2010 background sampling of Cupids Row Canal at three locations twice per month began along with staff training on sampling.
7	FOG Control Program	Public outreach program that promotes the proper disposal of FOG	Joint owned POTW completes FOG program for the City.

Section	Title	Requirement	SSMP Implemented? Y or N Comments
		Plan for the disposal of FOG generated within the Agency's service area	Joint owned POTW completes FOG program for the City.
		Demonstrate that the Agency has allocated adequate resources for FOG control program	Joint owned POTW completes FOG program for the City.
		Identification of sanitary sewer system facilities that have FOG-related problems	Joint owned POTW completes FOG program for the City. City has supplied POTW with trouble spots and POTW staff have responded
		Program of preventive maintenance for sanitary sewer system facilities that have FOG-related problems	Joint owned POTW completes FOG program for the City.
8	System Evaluation and Capacity Assurance Plan	Identification of elements of the sanitary sewer system that experience or contribute to SSOs caused by hydraulic deficiencies	Areas identified through a Wastewater Master Plan required under a C&D. Completing last phase of the last project identified. The total project cost before this last phase was $13.5 million. An update to the the City's wastewater Master Plan is planned to be completed in 2010.
		Established design criteria that provide adequate capacity	Criteria in place but not formalized within the City established criteria, though sewer projects done in the last ten years have adhered to best and current practices.
		Short and long term CIP that includes schedules for projects to addresses known hydraulic deficiencies	Schedules and projects are present within the CIP program.

Section	Title	Requirement	SSMP Implemented? Y or N Comments
		Procedures that provide for the analysis, evaluation, and prioritization of hydraulic deficiencies	Provided by Wastewater Master Plan done in 1999 and currently being updated and Master Plan planned to updated in 2010.
9	Monitoring, Measurement, and Program Modifications	Maintain relevant information to establish, evaluate, and prioritize SSMP activities	Yes, on-going
		Monitor implementation of the SSMP	Yes, on-going
		Measure, where appropriate, the performance of the elements of the SSMP	Yes on record in City files and SSO reports held at the State and Regional level
		Assess success of the preventive maintenance program	Enhanced level and more equipment are directly connected to rate increases as approved by City Council and the City's ten year CIP program.
		Update SSMP program elements based on monitoring or performance	Responded to SSMP elements and actual field experience.
		Identify and illustrate SSO trends	Currently done through annual reports on SSOs to the Regional Board
10	SSMP Program Audits	Conduct audits at least every 2 years	Yes
		Record the results of the audit in a report	Yes by March 15th
		Record the changes made and/or corrective actions taken	Yes by March 15th

Section	Title	Requirement	SSMP Implemented? Y or N Comments
11	Communications Program	Communicate with the public regarding the preparation of the SSMP	A report and Resolution detailing the components of that SSMP was considered and accepted by City Council in open session that can viewed by citizens in person or on cable television.
		Communicate with the public regarding the performance of the SSMP	Indirectly through budget documents, reports and resolutions before City Council, and wastewater rate public hearings all available through local cable television and/or City of San Bruno web site
		Communicate with tributary or satellite sewer systems	N/A

San Francisco Bay Regional Water Quality Control Board

Sanitary Sewer Overflow Annual Report - 2009

January 5, 2009

Bruce H. Wolfe, Executive Officer
California Regional Water Quality Control Board, San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612
ATTN: Michael Chee

Dear Mr. Wolfe,

Subject: Annual Report of Sanitary Sewer System Overflows for Calendar Year 2009

The purpose of this letter is to report the Sanitary Sewer System Overflows (SSOs) that occurred in the City of San Bruno sanitary sewer system during the period December 31, 2008 through December 31, 2009. This report is submitted pursuant to the requirements included in the San Francisco Bay Regional Water Quality Control Board Letter, New Requirements for Reporting Sanitary Sewer Overflows, dated November 15, 2004.

Number and Size of SSOs

The total number of SSOs for the reporting period was fifty-two [**52**]. All of the SSOs were associated with gravity sewers, and two [**2**] were associated with sanitary sewer pump stations. There was forty- nine [**49**] SSOs associated with dry weather conditions and three [**3**] SSOs associated with wet weather conditions. The sizes of SSOs are summarized as shown on Table 1.

Table 1. Number of SSOs

Size of SSO (gallons)	Number	Percent of Total by Number
Greater than or equal to 1,000	4	7.7
From 100 to 999	17	32.7
From 10 to 99	28	53.8
Less than 10 [can include in line above]	3	5.8
[Public portion of lateral (if applicable)]		
Total	**52**	**100**

The volume of spills contained and returned to the sewer system, as well as the volume reaching waters of the State is shown in Table 2.

Table 2. Volume of SSOs

	Volume (gallons)	Percent of Total by Volume
Total volume contained and returned to sewer system for treatment	95,407	96.3
Total volume reaching waters of the State	3,577	3.6
Total volume not contained but not reaching waters of the State (everything else)	91	.09
Total	99,075	100%

Four of the SSOs exceeded 1000 gallons or more. One SSO that exceeded 1000 gallons was due to Inflow and Infiltration during a large storm event, and exceeded the pumping capacity of the Sharp Park Sewer Lift station. The station was rehabilitated the following summer as part of a CIP project. The station was upgraded with larger pumps and a new force main. To date, the station now has the ability to pump all incoming flow. Another SSO that exceeded 1000 gallons was due to a broken private lateral. A portion of a private lateral had collapsed and was leaking sewage into an AT&T communications conduit. Initially, the City could not find the source of the leak and initiated an Emergency Proclamation to replace the entire sewer main and lower laterals within one City block. The work was completed and the severed lateral was found as the cause of the leak. Per City ordinance, the entire sewer lateral and connection to the main is the jurisdictional responsibility of the homeowner. If there is a proper cleanout installed or present at the property line, the City will then accept jurisdictional responsibility of the lower lateral to the main. The collapsed lateral had no cleanout and therefore was the responsibility of the property owner. The City views this incident as a private property responsibility SSO, but has added its numerical effects to this report. This individual SSO accounts for 83,000 gallons of the total volume contained and returned to sewer system for treatment. Several CIP projects have since been completed, or are in progress to remedy and accommodate high Inflow and Infiltration flows. This report does not include SSOs that occurred from privately owned service laterals within the City of San Bruno jurisdiction. The City maintains and is responsible for the portion of the sewer lateral from the private property owner's property line to the City sewer mains. The City did report [**13**] private lateral spills to the State.

Cause of SSOs

The predominant cause[s] of SSOs during the period of this report was grease and debris. The distribution of SSOs by cause is shown on Table 3.

Table 3. Causes of SSOs

Cause of SSO	Number	Percent of Total
Blockage:		
Roots	7	13.5
Grease	14	26.9
Debris	14	26.9
Debris from Laterals	10	19.2
Vandalism	1	1.9
Animal Carcass		
Construction Debris		
Multiple Causes		
Subtotal for Blockage	**46**	74%
Infrastructure Failure	4	7.7
Inflow & Infiltration	1	1.9
Electrical Power Failure	1	1.9
Flow Capacity Deficiency		
Natural Disaster		
Bypass		
Cause Unknown		
Total	**52**	**100%**

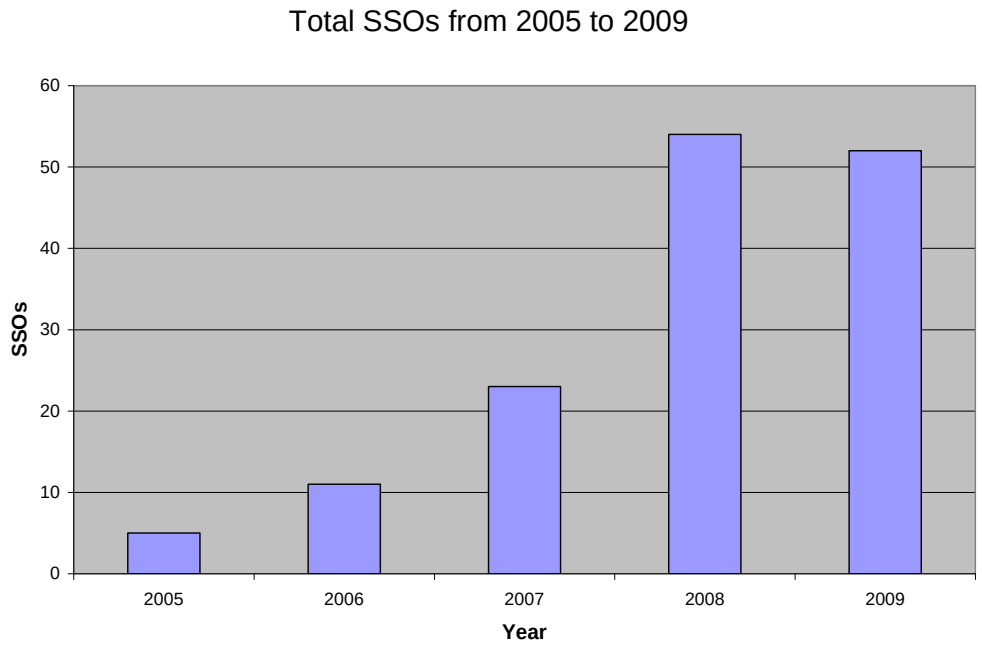
Location of SSOs

Twelve of the Fifty-two SSOs were in the hillside areas of San Bruno. The other forty SSOs were in the flatter and older areas of San Bruno.

SSO Trends

The bar chart below shows a comparison of data for the current reporting period with the previous reporting period. **Note:** The City began reporting SSOs from City owned, and privately owned laterals per State regulations on May 1st, 2007.

Example: **Figure 1. Total SSOs for 2006 – 2009**



Status of Development of Sewer System Management Plan (SSMP)

The City has met and completed all of the elements of the SSMP that were required by the August 31, 2007 deadline. The City as well is at the end of completing $13.5 million dollars of capital improvement projects in meeting the requirements of the Cease and Desist order issued to the Cities of South San Francisco and San Bruno in 1997 The wastewater (and water) rates were approved by City Council in 2009 and provides the funding currently and increasing over time sewer infrastructure replacement program in addition to appropriate CIPs to meet other deficiencies as well as possible expansions. A new wastewater master plan update is planned for 2010. City of San Bruno staff initiated a FOG control program with regular inspection, especially the hotspots, with the South San Francisco/San Bruno POTW environmental compliance staff in addition to an existing contract with the County of San Mateo that has

indirect impact on FOG via their stormwater compliance inspections. The computerized maintenance management system (CMMS) for the collections system as well as other operations at the Public Works Corporation Yard is including GIS information and CMMS is currently available on individual supervisor's computers and will be made available in portable laptops to locate needed information, such as GIS locations. The City does have a mature hot spot sanitary sewer collection system program. A SCADA system for the sanitary sewer pumping stations is in a biddable format and will be bid in 2010. The five-year closed circuit televising of all the City's collection system over that time period was approved by City Council in December 2007 and in 2009 completed two fifths of the City, with three fifths done in early 2010. The City is working on a new storm drainage system master plan that as a tool related to SSOs will improve the City's knowledge of the system so that it may be possible to better contain or reroute SSOs within the storm drain system and later recovery of those wastewater spills. The City purchased a portable pump and pipe reel system allowing more effective pumping of SSOs that reach storm drains to be returned to the sanitary sewers. Collection system goals have been imbedded within the capital improvement program as well as the programmed renewal and replacement program.

Other Information

The Deputy Director of Public Works/Maintenance and Operations, and the Wastewater Division Services Manager both hold Grade IV certification in Collection System Maintenance. Other certification includes the Wastewater Division Lead Worker and one Maintenance Worker, who both hold a Grade II certification in Collection System Maintenance.

Certification

I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signed,

Robert Howard
City of San Bruno
Deputy Public Services Director – Utilities and Operations
Public Works Department

Appendix B: Log of Sewer System Management Plan Changes

Table B - 1: Log of SSMP Changes

Date	SSMP Element #	Description of Change/Revision Made	Person Authorizing Change

Appendix C: Sewer System Management Plan Council Adoption Documents

CERTIFIED COPY

RESOLUTION NO. 2016 - 33

ADOPTING THE UPDATED SANITARY SEWER MANAGEMENT PLAN

WHEREAS, in 2006, the State of California Water Resources Control Board adopted the Statewide General Waste Discharge Requirement (WDR), (Order No. 2006-0003-DWQ), for Sanitary Sewer Systems; and

WHEREAS, the City of San Bruno, as an Operator of a Sanitary Sewer System, developed the first Sanitary Sewer Management Plan in 2008 and a five-year update in 2013; and

WHERAS, in 2013 the California Water Resources Control Board updated the 2006 Waste Discharge Requirement (Order No. WQ 2013-0058-Exec), requiring sanitary sewer system operators to revise and resubmit a Sanitary Sewer Management Plan to incorporate the new elements of the 2013 Waste Discharge Requirement; and

WHEREAS, the City contracted with Causey Consulting, Inc. to update the Sanitary Sewer Management Plan in order to be in compliance with the 2013 State Waste Discharge Requirement; and

WHEREAS, the purpose of the Sanitary Sewer Management Plan is to provide a comprehensive sewer operations elements including the applicable Sewer Master Plan, Capital Improvement Progam goals, legal authority, and operational goals and standards for operating a sanitary sewer system in a responsible order; and

WHEREAS, the updated Sanitary Sewer Management Plan is in compliance with the 2013 State Waste Discharge Requirement and designed to satisfy the requirements of the Cease and Desist Order with the San Francisco Bay Regional Water Quality Control Board and the Consent Decree with San Francisco Baykeeper; and

WHEREAS, the cost to prepare the Sanitary Sewer Management Plan was approximately $14,500, funded through the 2015-16 Wastewater Operating Budget.

NOW, THEREFORE, BE IT RESOLVED: that the City Council adopts the Updated Sanitary Sewer Management Plan.

---oOo---

I hereby certify that foregoing **Resolution No. 2016 - 33** was introduced and adopted by the San Bruno City Council at a regular meeting on April 12, 2016, by the following vote:

AYES: Councilmembers: Ibarra, M. Medina, R. Medina, O'Connell, Mayor Ruane

NOES: Councilmembers: None

ABSENT: Councilmembers: None

CITY OF SAN BRUNO INCORPORATED DEC. 23RD 1914 SAN MATEO CO CAL

Carol Bonner, City Clerk

I hereby certify this to be a full, true and correct copy of the document it puports to be, the original of which is on file in my office.

Dated: April 19, 2016

Vicky S. Hoshi Deputy City Clerk

City Clerk of the City of San Bruno